MATSYA: Reconstructing the True Morphological Root of an Ancient Sanskrit Compound and Its Cosmological Significance

Jessica Scott (Dunn)

July 5th 2026

Revised July 6th, 2026

10.5281/zenodo.21226365

Abstract

This paper proposes a new reading of *matsya* (मत्स्य) that shifts the term from zoology to cosmology, arguing that its earliest meaning encoded manifestation rather than aquatic life. Drawing on Indo-Iranian morphology, phonetics, and early textual testimony, the study reconstructs *matsya* as an ontological category whose later association with fish reflects a secondary development. This reinterpretation reshapes the opening of the Daśāvatāra and the role of the Matsya lineage in early Indo-Iranian thought.

Keywords: Sanskrit morphology, Proto-Indo-Iranian, Avestan masyō, Daśāvatāra, cosmogony, mīna, mīn, Dravidian; Satyavatī, Meenesh, *matsya*, Sanskrit morphology, Indo-Aryan linguistics, Vedic cosmology, Dashavatara, Vedic Sanskrit, Yaska, *Nirukta*

©2026 Jessica Scott Dunn. All rights reserved. Published under Glyph Publishing. Openly licensed under CC BY NC-ND 4.0.

Author Note

Jessica Scott (Dunn) is an independent scholar working at the intersection of comparative mythology, Vedic linguistics, and the archaeology of the ancient Indo-Iranian world. She is the author of *The Voynich Manuscript: The Cipher and The Compendium, The Sacred Mountain of Haoma and Soma, and The Decipherment of the Indus Script.* Her research focuses on the recovery of cosmological and linguistic structures embedded in ancient sacred texts and symbol systems.

The author declares no conflicts of interest. This paper was completed independently and has not been submitted for prior publication elsewhere. Correspondence regarding this article should be directed to Jessica Scott (Dunn), Independent Scholar, Charlotte, NC, United States.

MATSYA: Reconstructing the True Morphological Root of an Ancient Sanskrit Compound and Its Cosmological Significance

1. Introduction

At the beginning of time, so the ancient texts of the *Shatapatha Brahmana* (1.8.1.1–1.8.1.10) record, a small creature appeared in the cupped palms of Manu as he performed his morning ablutions. The creature spoke, identifying itself and issuing a warning: a catastrophic flood would come, and Manu must build a boat and preserve all that was necessary for the continuation of life and sacred knowledge. Over subsequent years, the creature grew — from a small jar to a tank, to the open ocean — until its sheer immensity commanded the waters of the flood as it towed Manu's vessel to safety. This creature, which saves the primordial man and all cosmic order from annihilation, is *Matsya*, the first of Vishnu's ten avatars in the *Dashavatara* sequence. It has been translated, almost without exception in modern Sanskrit lexicography, as "fish" (Monier-Williams, 1899; Böhtlingk & Roth, 1855–1875). And yet, the morphological structure of the term *matsya* has never been satisfactorily explained from first principles of Indo-Aryan philology. No extant grammatical tradition has adequately identified the independent root or roots from which the compound is built, nor has the function of its constituent morphemes been subjected to rigorous comparative linguistic analysis. The present paper argues that this lacuna is not trivial: it is a concealment, however unintentional, of one of the most philosophically significant designations in Vedic cosmological thought.

The origin of Proto-Indo-Iranian *matsya-* “fish” is traditionally classified as unknown, with major Indo-European reference works noting that the form lacks any secure PIE ancestry. Lubotsky lists *matsi̯a-* simply as “fish,” offering no Indo-European derivation and placing it

among substratal items in the Indo-Iranian lexicon (Lubotsky 1999: 3). Schmitt likewise records *mátsi̯a-* as an etymologically opaque term within Indo-Iranian (Schmitt 2018: 1949), and Mayrhofer concludes that no convincing PIE root can be identified (Mayrhofer 1996: 297–98). This perceived opacity has led some scholars to propose a BMAC substrate origin, especially given the absence of similarity to Western Indo-European *peysk-* (Latin *piscis*) or Eastern Indo-European *dʰǵʰu-* ("fish"). A more speculative proposal links *matsya-* to Proto-Germanic *matiz* "food," ultimately from PIE *meh₂d-* "to drip, ooze; grease, fat," though this connection is phonologically weak. I argue, however, that the "unknown origin" designation arises not from genuine etymological isolation but from a misdivision of the word inside Sanskrit itself. Traditional treatments implicitly segment the form as *mat-sya* or *mats-ya*, searching for a root *mat-* or *mats-* and finding none—thereby generating the illusion of a substrate loan. When correctly parsed as MA- + -TSYA, where MA- (√*mā*) means "to measure, manifest, bring into bounded form" and *-sya* is cognate, *matsya* becomes a fully regular Sanskrit cosmogonic compound meaning "of/from the act of bringing into manifested form." Under this analysis, *matsya* is not a lexical orphan of obscure foreign origin but a transparent Indo-Iranian formation whose later restriction to "fish" reflects semantic narrowing rather than substrate inheritance.

MA encodes the productive Vedic root of manifestation, measurement, and coming-into-bounded-form - that which has taken on form from the formless, that which has crossed the threshold from non-being (*asat*) into being (*sat*). This paper argues, accordingly, that the identification of *Matsya* with a biological fish represents a later, secondary rationalization overlaid upon a primordial cosmogonic concept, a familiar process of semantic narrowing in which a term of cosmic abstraction becomes anchored to its most salient or vivid cultural vehicle.

The significance of rehabilitating this reading is considerable. The Dashavatara sequence has attracted anachronistic popular commentary equating it with Darwinian evolutionary theory

— fish, tortoise, boar, man-lion, dwarf, warrior, king, sage, enlightened one, and eschatological savior as somehow anticipating biological evolution. This reading is not only scientifically tendentious but philosophically incoherent on the tradition's own terms. The avatar sequence is not a biological taxonomy; it is an ontological curriculum. If *Matsya* originally designated the "of/from [the act of] bringing into manifested form" — the primordial fact of existence-with-form — then the Dashavatara sequence begins with pure existence and moves through successive modes of increasingly complex, ethically engaged, and consciously differentiated being, culminating in the eschatological perfection of *Kalki*. This reading is philosophically coherent, consistent with the Vedic cosmogonic discourse of *asat* → *sat* → *rupa* (non-being → being → form), and capable of rehabilitating the Dashavatara as a genuine contribution to ancient ontology rather than a naive anticipation of modern biology.

The methodology employed in this paper is fourfold. First, the paper conducts an internal morphological analysis of *matsya*, parsing its constituent elements against the attested resources of Vedic and Classical Sanskrit morphology. Second, the paper applies the multi-derivational etymological method modeled on Yaska's *Nirukta* (Sarup, 1967), the oldest surviving Indian treatise on etymology and semantics, which explicitly endorses the pursuit of multiple derivational possibilities for ancient Sanskrit terms. Third, the paper draws on comparative Indo-European linguistics, particularly the proto-root systems of Proto-Indo-Iranian, to situate the proposed morphemes within a documented linguistic heritage. Fourth, the paper conducts a contextual reading within the major Vedic and post-Vedic cosmogonic texts in which *Matsya* appears, demonstrating that those texts support the cosmogonic reading and are only partially intelligible under the zoological one.

2. The Two-Word Problem: Why Sanskrit Has Two Words for Fish

2.1 The Lexical Puzzle

Sanskrit possesses two distinct, independently attested words for fish: *mīna* (मीन) and *matsya* (मत्स्य). This is not a case of regional variation, dialectal synonymy, or register-level doublets of the kind that naturally accumulate in any large literary language over millennia. The two words have different phonological shapes, different morphological structures, different etymological roots, and — critically — different distributions across the textual, ritual, onomastic, and devotional record. A language does not maintain two fully independent words for a single common referent unless the two words are doing different semantic work. The central premise of this paper is that they are: *mīna* is, and has always been, the zoological word for fish; *matsya* is, and was originally, a cosmogonic ontological designation — "of/from manifested form" — that was applied to fish secondarily, after its primary cosmogonic meaning had been lost. The apparent lexical redundancy dissolves once the original semantic distinction is restored.

The word *mīna* (मीन) is among the oldest and most widely distributed fish-words in the subcontinental linguistic record. It appears in Sanskrit as a primary nominal with no surviving derivational analysis — it does not parse as root + suffix; it simply means fish, as a basic lexical item (Monier-Williams, 1899). Its cognates extend across the Dravidian family without interruption: Tamil *mīn* (மீன்), Malayalam *mīn* (ḾЊЙ), Kannada *mīna* (ಮೀನು), Telugu *mīnu* (మీను). The geographic spread of the *mīna*/*mīn* form across both Indo-Aryan and Dravidian branches — two language families with distinct origins — indicates that the word is either extremely ancient in the subcontinent, predating the Indo-Aryan/Dravidian divergence in local usage, or was borrowed in both directions at such an early date that it became equally embedded in both traditions (Burrow and Emeneau, 1984; Zvelebil, 1990). Either conclusion points to the same result: *mīna* is the subcontinent's native, primary, deep-antiquity word for fish. It was the word the Indus Valley people used. The Indus script decipherment by Scott Dunn (2026)

identifies *mīna* as the operative Indus-corpus word for fish, confirming its presence in the pre-Sanskrit stratum of subcontinental language.

The Dravidian development of Indo-Aryan *mīna* "fish" into Proto-Dravidian *min*/*mīn* "to be" cannot be accounted for by ordinary semantic extension, but instead reflects the transfer of an Indo-Iranian ontological category embedded in the inherited lexeme *mīna*. Within Proto-Indo-Iranian cosmology, the fish occupies the primordial liminal domain of the cosmic waters — an ontic threshold between non-manifest and manifest existence. This is structurally evident in the bifurcation of Indo-Iranian fish terminology: the inherited zoological term *mīna* (Sanskrit *mīna*, Avestan *maēna*-) coexists with a secondary cosmological term (*matsya*, Younger Avestan *masyō*), formally aligned with the *mṛ*/*mer*- "mortal" root (Sanskrit *martya*, Avestan *mašya*-). The latter cluster demonstrates that Indo-Iranian speakers conceptualized aquatic beings as belonging to the same ontological stratum as mortals — entities defined by emergence, perishability, and liminality. Although Dravidian languages did not borrow the Sanskrit innovation *matsya*, they borrowed *mīna* at a stage when the Indo-Iranian cosmological association between "fish" and "first existent being" was already established. Consequently, the Dravidian reanalysis of *mīna* into the existential predicate *min*/*mīn* represents not a spontaneous semantic drift but the internalization of an Indo-Iranian ontological schema in which aquatic life functions as the primordial instantiation of being. The Dravidian existential verb thus preserves the cosmological logic underlying *matsya* without inheriting its Sanskrit morphology, demonstrating that the semantic evolution of *min* is driven by ontological transfer rather than lexical accident.

The word *matsya* is structurally different in every relevant respect. Unlike *mīna*, it parses: it has a discernible internal morphological structure, a root, and a suffix. As established in §4 of this paper, the parse is MA- (√*mā*: to measure, bring into form, manifest) + -TSYA (liaison -*t*- + relational suffix -*sya*, PIE *-yos-*), yielding "of/from manifested form." This is not a zoological description. It is an ontological category designation — the kind of name that belongs to a

cosmogonic context, not a marketplace. It names a kind of being (that which is "of/from" the act of MA-manifestation), not an animal species.

Table 2

Indo-Iranian and Dravidian Fish Terminology: The Two-Register Bifurcation

Branch	Inherited Fish Word	Secondary / Cosmogonic Fish Word	Man / Mortal Word	Notes
Proto-Indo-Iranian (PII)	*mīna-	—	—	The only inherited fish word at the PII level; no secondary cosmogonic term is reconstructible.
Vedic Sanskrit	mīna	matsya	martya	matsya is a Sanskrit cosmogonic innovation (MA- + -TSYA). All three terms coexist, occupying distinct registers.
Old Avestan	maēna-	—	mašya-	mašya- means mortal human, NOT fish — confirming the root in this branch encodes mortality and humanness – i.e. form - not a zoological referent.
Younger Avestan	maēna-	masyō	mašya-	masyō = fish only in Younger Avestan — a secondary innovation parallel to Sanskrit matsya, but without the epenthetic -t-, proving the -t- in Sanskrit is a liaison consonant particular to -s in -sya.
Dravidian	Borrowed: mīna → mīn/min	—	—	Dravidian borrowed mīna (zoological), not matsya; mīn/min developed into an existential predicate (to be), reflecting the internalized Indo-Iranian ontological association of the fish with primordial existence.

Note. The bifurcation between zoological mīna and cosmogonic matsya is reconstructible to the Proto-Indo-Iranian level, where *mīna- is the sole inherited fish term. The secondary cosmogonic term (matsya in Sanskrit, masyō in Younger Avestan) emerged independently in the two branches, with distinct phonological outcomes confirming the morpheme-boundary analysis: Sanskrit inserts a liaison -t- (matsya), Younger Avestan does not (masyō). The Dravidian data

confirms the zoological register (mīna) was borrowed while the cosmogonic register (matsya) was not.

2.2 What the Onomastic Record Preserves

If the two words had always been synonyms — two equivalent fish-words in free variation — the devotional and onomastic tradition would show no consistent pattern of preference between them. It shows a very consistent pattern. The Sanskrit priestly and Puranic register uses *matsya*: the avatar is the Matsya avatar; the Puranic text is the *Matsya Purāṇa*; the deity is *Matsyamūrti*; the birthday festival in the pan-Hindu calendar is *Matsya Jayantī*. But the folk, community, vernacular, and ritual register consistently uses the *mīna*/*meen* root instead. The Meena community of Rajasthan — one of India's oldest tribal groups, numbering approximately five million, claiming mythological descent from the Matsya avatar — named themselves after *meen*, not *matsya*. They call the deity Meenesh ("Lord of the Meenas"), not *Matsyeśa* (Kapur, 200). They celebrate the avatar's birthday as *Meenesh Jayantī*, not *Matsya Jayantī*. Temples dedicated to the Matsya avatar in Kerala take their names from the *mīn* root: Perumeenpuram ("great meen-place"), the town of Meenangadi ("meen-market/meen-place"), and the temple whose most important devotional ritual is called *mīnūt* — "feeding the fish" — a name built from *mīn*, not from *matsya* (Bhaskar, 2021).

This bifurcation is not coincidental. It maps precisely onto the distinction this paper argues for: *matsya* in the register where cosmogonic meaning is preserved (priestly Sanskrit, Puranic texts, formal theology); *mīna*/*meen* in the register where the zoological referent is primary (folk identity, community names, ritual practice, place names). The communities that call their deity Meenesh and their festival *Meenesh Jayantī* are, unknowingly, preserving in folk form the very semantic distinction that the paper argues was encoded from the beginning: *mīna* names the fish; *matsya* names the cosmogonic identity. The two words were never the same word. They have

never been used interchangeably in practice, even when later commentators began treating them as synonyms in theory.

2.3 The Proposed Resolution

The two-word problem has a single coherent resolution. *Mīna* is, and always was, the zoological term: the deep-antiquity, Dravidian-cognate, Indus-corpus word for the animal fish. *Matsya* is, and originally was, the cosmogonic term: "of/from manifested form" — the ontological designation of the first avatar as the first manifested existent entity, the first being to cross from *asat* (the unmanifest) into *sat* (manifest existence). The avatar took fish form in the narrative; and the fish — the creature that literally emerges from the formless deep waters into tangible presence, that appears from the unmanifest aquatic void into the manifest world — was the most vivid, most locally immediate experiential embodiment of "that which comes from the waters into manifested form." So the cosmogonic name *matsya* was applied to the fish: not because the fish was already called *matsya*, but because the avatar's cosmogonic identity was perceived as most perfectly embodied in the fish form. The name traveled from the ontological to the zoological — and in doing so, it created the apparent redundancy with *mīna* that has puzzled scholars ever since. The puzzle is resolved not by explaining the redundancy away, but by recognizing that the two words were never redundant: they were always naming different things, from different registers, about the same sacred animal.

This resolution also explains why the folk-etymological analyses documented at *Nirukta* 6.26 — "they revel in eating each other" (√*mad*) and "that which floats in water" (√*syand* + *madhu*) — were able to take hold. By the time Yāska was writing, c. 600 BCE, the cosmogonic register of *matsya* had already become sufficiently opaque that even the most sophisticated Sanskrit etymologist of antiquity could not recover the original MA- + -TSYA parse. The zoological referent (fish) had by then absorbed the word entirely, and folk etymologists reached

for derivations that made sense of a fish-word rather than of a cosmogonic-category-word. Yāska, not knowing about the two-word distinction, treated *matsya* as a fish-word that needed a fish-explanation. His competing derivations are not failed attempts at the truth. They are evidence that the truth had already been lost — and that *mīna* and *matsya*, once categorically distinct, had been collapsed into a single zoological register from which the original cosmogonic reading could no longer be reconstructed by inspection alone.

3. Theoretical Framework

3.1 Yaska's Etymological Method as a Model

The intellectual foundation of this paper's methodological approach is the *Nirukta* of Yaska, composed approximately in the sixth to fifth century BCE and constituting the oldest surviving treatise on etymology, philology, and semantics in the Indian tradition (Sarup, 1967). Yaska's project in the *Nirukta* was the explanation of obscure Vedic words, particularly those in the *Nighantu* — a classified glossary of difficult Vedic terms — and his method was explicitly and deliberately multi-derivational. Rather than settling upon a single acceptable etymology for a given term, Yaska systematically explored multiple possible derivations, sometimes in apparent tension with one another, on the explicit grounds that ancient Sanskrit words carry polysemous morphological histories whose full depth a single derivation cannot exhaust. This is not etymological irresponsibility but rather a principled recognition that the oldest Sanskrit vocabulary emerged from a complex and multi-layered linguistic history in which a single sound-form could carry simultaneously the meaning-weight of multiple roots and morphological operations (Sarup, 1967).

The methodological principle Yaska articulates is directly applicable to *matsya*. The conventional "fish" reading represents one derivational layer — the one that achieved dominance

in the lexicographical tradition from Monier-Williams (1899) and Böhtlingk and Roth (1855–1875) onward. But the Yaskan method demands that we not rest there. It demands that we ask: what other derivational possibilities does the phonological and morphological structure of *matsya* make available? This paper proposes that the bipartite parsing *MA + TSYA* recovers a deeper derivational layer, one that is not in contradiction to the fish association but that undergirds it, providing the cosmogonic concept for which the fish became the narrative vehicle.

3.2 Paninian Morphology and Secondary Nominal Derivation

The grammatical framework within which this paper conducts its morphological analysis is principally Paninian, derived from Panini's *Ashtadhyayi*, the systematic Sanskrit grammar composed approximately in the fourth century BCE that remains the foundational analytical instrument for Sanskrit morphology. Panini's system distinguishes between *krit* suffixes — those applied directly to verbal roots to produce primary nominal or participial derivatives — and *taddhita* suffixes — those applied to already-nominalized bases to produce secondary derivatives encoding relational, possessive, or categorizing meanings (Macdonell, 1910). The suffix *-ya* in Sanskrit is particularly productive and functionally ambiguous: it performs the work of (1) denominative verb formation; (2) possessive or relational adjective formation; (3) verbal adjective and gerundive formation; and (4) abstract or entity-nominalizing derivation, as seen in *rajanya* ("one belonging to the royal category") and *brahmanya* ("one belonging to the Brahman category or relating to sacred speech").

The critical morphological question for *matsya* is whether the segment *tsya* represents a unitary suffix *-tsya* applied to a base *ma-*, or whether the word should be segmented as a root *mat-* or *mad-* with a *-ya* suffix. Neither of these analyses has been satisfactorily defended in the extant literature. The root *mat-* as an independent Vedic verbal root with the meaning necessary to produce "fish" is not independently and robustly attested. The suggestion in some

commentaries that *matsya* derives from *mats-* (glossed as "to glisten" or "to rejoice") is phonologically possible but semantically attenuated and without strong independent attestation as a root underlying zoological terminology. This paper proposes instead that the bipartite reading *MA + TSYA* — where *-tsya* functions as the liaison consonant -t- plus the relational suffix -sya (PIE *-yos-: 'of/from, belonging to') — deserves sustained morphological and comparative analysis, and the remainder of this paper undertakes that analysis.

3.3 The Sat/Asat Cosmogonic Polarity in Vedic Thought

Before proceeding to the morphological analysis proper, it is necessary to establish the cosmological framework into which the *MA-TSYA* reading is proposed to fit. The foundational ontological polarity in Vedic thought is the dyad of *sat* (being, existence, the real, the actual) and *asat* (non-being, the unmanifest, the primordial void prior to creation). The locus classicus for this polarity is the Nasadiya Sukta, the celebrated 129th hymn of the tenth *mandala* of the *Rigveda*, which poses the origin of the cosmos as a profound question rather than a narrative answer: "Neither being (*sat*) nor non-being (*asat*) existed then; neither sky nor the atmosphere beyond. What was enclosed? Where? In whose protection? Was there water, unfathomably deep?" (Griffith, 1896, 10.129.1). The hymn posits an originary state prior to both being and non-being, from which being first manifested — a state whose nature language can only approach asymptotically, since language itself is a product of the being-world and cannot directly designate what preceded it.

The concept of first manifestation — the primordial *sat* emerging from *asat* — is the cosmological horizon against which the present argument positions the *MA-TSYA* reading. If the first avatar's name encodes precisely the concept of "manifested existent entity," then *Matsya* is not incidentally the first avatar but necessarily so: it designates the primordial cosmogonic event itself, the moment at which something first exists, the first crossing of the threshold from non-

being into being. The narrative of the *Shatapatha Brahmana* (1.8.1.1–1.8.1.10) reinforces this reading in its structural logic: the fish begins as the smallest possible entity — barely perceptible, cupped in Manu's hands — and grows to oceanic immensity, a narrative trajectory that mirrors the ontological expansion from the minimal existent (the first *sat* at the moment of emergence from *asat*) to the fullness of manifested reality.

4. Morphological Analysis of MA-TSYA

4.1 The Root MA: Manifestation and Measure

MA is one of the oldest and most semantically productive phonetic roots in Proto-Indo-European and early Indo-Aryan. In Sanskrit, the root √*mā* and its related forms √*man* and √*māy* encompass a semantic cluster that is internally coherent and of remarkable scope: (1) to measure (*māna*, measure; *mātrā*, unit of measure; *mātra*, mere extent or dimension); (2) to fashion, construct, or bring into form (*māya* in its Vedic sense, *brahma* as fashioned sacred speech); (3) to manifest or appear, as in *māyā*, originally the divine power of manifestation and creative actualization rather than the later Vedantic sense of illusion; and (4) the negative or prohibitive particle *mā*, which paradoxically underscores the root's foundational relation to the question of existence and non-existence — to prohibit is to negate a coming-into-being (Monier-Williams, 1899; Whitney, 1885). In Proto-Indo-European, the root **meh₁-* ("to measure, to delimit") underlies Latin *metiri* (to measure), Greek *métron* (measure), and Old English *mǣtan* (to meet, measure out), all carrying the interrelated senses of determining, delimiting, and bringing into bounded, therefore perceptible, form.

The single most revealing derivative of √*mā* is one that is rarely discussed in this context: *mātar* (मातर्) — mother. The Sanskrit word for mother parses unambiguously as MA- + *-tar*, the Proto-Indo-European agentive suffix *-tér-/*-tṛ- meaning “the one who performs [the action of

the root].” *Mātar* = “she who MA-s” — she who brings into form, she who manifests, she who measures out physical existence. The stem form, *mātṛ-* (मातृ), appears in compounds as *māt-* before consonant-initial suffixes — producing the *mat-* cluster at the morpheme boundary in exactly the same phonological environment as the *mat-* in *matsya*. This parallel is not incidental: in both *mātar* and *matsya*, the *mat-* sequence is not a root but a boundary artifact — MA- followed by a *t*-initial suffix (*-tar* in the case of mother; *-tsya*, the liaison *-t-* + relational *-sya*, in the case of *matsya*). The *mat-* is in both cases the meeting point of root and suffix, not a morpheme in its own right. Critically, *mātar* is not an isolated Sanskrit formation: it is one of the most stable words in the entire Indo-European family. Latin *mater*, Greek *mētēr* (μήτηρ), Old Irish *máthir*, Armenian *mayr*, and English *mother* all descend from PIE *méh₂tēr — all built on the same MA- root + agentive *-tér- suffix, all meaning “she who brings into form.” The universality of this derivation across every branch of Indo-European is the deepest available confirmation of what the MA- root means: not abstract measurement in the mathematical sense, but the act of bringing physical form into being — the productive, generative, form-giving act by which the formless becomes the formed. Mother is “she who brings physical form into being.” *Matsya* is “of/from [the act of] bringing physical form into being.” The same root, the same semantic core, the same cosmogonic event — one naming the agent who performs it (mother), the other naming the relational category of what results from it (the first manifested entity, “of/from” that act of manifestation). The *mat-* that appears in both words is the visible seam at which the MA- root meets its suffix — in one word the agentive *-tér- suffix of “she who does,” in the other the relational *-syo- suffix of “of/from what was done.”

The nominative form of *mātar* discloses a second, complementary morphological reading that deepens the case considerably. In Sanskrit, the nominative singular of this *r*-stem noun is *mātā* — the form in which the word appears across most Purāṇic and Epic attestations. The surface form *mātā* is morphologically identical to MA- plus the suffix *-tā*, where *-tā* is the

productive Sanskrit abstract-noun suffix derived from PIE *-teh₂-. This suffix encodes “the state, condition, or substantive locus of” the root: *sundara* becomes *sundaratā* (beauty; “the state of being lovely”), *deva* becomes *devatā* (divinity; “the state of being divine”). Applied to the MA- root, MA- plus *-tā* yields “the state, the condition, the substantive ground of the act of bringing physical form into being” — not the agent of form-giving, which is the reading of *mātar* via the *-tér-* agentive suffix, but the vessel: the womb, the locus from which physical form emerges. Sanskrit thus preserves, within the single paradigm of the word for mother, a morphological double structure that encodes both faces of the cosmogonic event. The oblique stem *mātar-*/*māṭṛ-* encodes the agentive: she who brings into form, the performer of the MA- act. The nominative *mātā* encodes the vessel: the womb, the ground of form-emergence, the state of being the origin of physical existence. These are not competing etymologies but two grammatical angles on the same reality — mother is, in the Sanskrit morphological record, simultaneously the agent who brings physical form into being and the womb from which physical form emerges. The Latin reflexes of the same PIE root confirm this dual axis. *Matrix* (from *māter* plus relational -ix, “that which generates; the womb; the mold into which matter is poured to receive shape”) preserves the vessel reading explicitly. *Materia* — the physical substance of things, the “stuff” from which formed objects are made — names what the womb produces: not the act, not the agent, not the vessel, but the outcome of the MA- event itself. The arc across these three Latin words — *mater* (agent of form), *matrix* (vessel of form), *materia* (substance of form) — is the full semantic field of the MA- root expressed in three grammatical frames. *Matsya*, as MA- plus relational *-tsya*, belongs to this same arc: it names the first entity defined by its relation to the MA- event, that which has come from the womb of undivided potential into the bounded, measurable, formed world. The mother is the womb of manifested form; *matsya* is what it means to have crossed through it.

The semantic connection between measuring and manifesting is not accidental but conceptually necessary: to bring into form is precisely to bring into measurable, bounded, perceptible existence — to give the formless a limit, a *mātrā*, through which it becomes a *this* rather than an undifferentiated everything. In Vedic thought, this is precisely the work of *māyā* understood in its oldest sense: the divine capacity to manifest and give form. The *Rigveda* uses *māyā* in this sense of divine creative power — the capacity of the gods, particularly Varuna and Indra, to produce measurable, bounded, real forms from the unlimited substrate of cosmic potential (Doniger, 1975). When a being is said to manifest, to take on form, to become perceptible and real within the world, the root *MA* and its semantic field are operative. The earliest avatar's name beginning with *MA* — and specifically with the root-vowel *a* rather than the lengthened *ā* — positions it within this semantic field of bringing into bounded form, of the first act of measurable manifestation.

Crucially, Whitney (1885) documents the root √*mā* as one of the most frequently occurring and morphologically generative roots in the Vedic corpus, appearing in hundreds of derivative forms across the nominal, verbal, and participial paradigms. This productivity is itself significant: a root this foundational, this morphologically active, appearing at the head of the first avatar's name, is unlikely to be semantically inert or merely conventionalized. Its presence as the first syllable of *MA-TSYA* carries the full weight of its semantic field into the compound.

4.2 The Segment -TSYA: Liaison -t- + Relational Suffix -sya (PIE *PIE *-yos-*)

The suffix *-sya* is a relational morpheme. It does not assert existence, confer ontological status, or mark nominal category. It encodes a pure relational meaning: “of, from, belonging to, of the nature of.” Its Proto-Indo-European ancestor is **PIE *-yos-*, one of the oldest and most stable suffixes in the entire Indo-European family, attested without interruption from Vedic Sanskrit through Iranian, Greek, Latin, and beyond (Fortson, 2010; Meier-Brügger, 2003). The Sanskrit

reflex -*sya* is most visible in the genitive singular of the masculine and neuter a-stem declension, where Pāṇini's rule (Aṣṭādhyāyī 7.1.12) assigns -*sya* as the standard case ending: *deva* → *devasya* ("of the god"), *rāma* → *rāmasya* ("of Rāma"), *vana* → *vanasya* ("of the forest"). The suffix is fully productive, applied across the entire a-stem nominal class, and its meaning in every instance is the same: it places the noun in a relational structure with respect to some other referent, indicating source, possession, membership, or characterization.

The autonomy of -sya as a suffix is demonstrated most cleanly by the Sanskrit pronoun paradigm. The genitive singular forms of the personal, relative, and interrogative pronouns are tasya ("of that/him"), kasya ("of which/whom?"), yasya ("of who/which"), and asya ("of this/him") — all built identically: pronominal base + -sya. These forms contain no root-final -t-; the full suffix in every case is simply -sya. The morphological autonomy of -sya is not a proposed analysis but a textbook fact of Sanskrit grammar (Macdonell, 1910; Whitney, 1889). What requires explanation in matsya, therefore, is not where -sya comes from — that is unambiguous — but where the intervening -t- comes from. The paper's answer is that -t- is a liaison consonant inserted at the juncture of the base MA- and the suffix -sya, following the well-documented Sanskrit sandhi process of epenthetic stop insertion at vowel-initial suffix boundaries. The correct segmentation is therefore MA- + liaison -t- + -sya = MA-T-SYA, not 'root mat-' + suffix -ya.

The Avestan cognate provides the decisive cross-linguistic confirmation. Old Iranian masyō (fish, Younger Avestan) corresponds to Sanskrit matsya in meaning, and the phonological correspondence is transparent: Avestan masyō = ma- + -syō (the Old Iranian reflex of PIE *PIE *-yos-). Crucially, Avestan masyō contains no epenthetic -t-: the base ma- connects directly to the suffix -syō. This absence proves that the -t- in Sanskrit matsya is a Sanskrit-internal development — a liaison consonant added at the morpheme boundary in Sanskrit phonology — and is not a feature of the inherited root. The morpheme boundary in the proto-form was MA- +

*-syo-, exactly the structure the paper proposes, with Sanskrit adding epenthetic -t- and Avestan not. No competing analysis of matsya has accounted for this correspondence; the MA- + -TSYA segmentation is the only parse that explains why the Avestan cognate lacks the -t- (Fortson, 2010; Meier-Brügger, 2003).

A further confirmation is internal to Sanskrit and is perhaps the most elegant: the genitive form matsyasya, attested at Bhāgavata Purāṇa 8.24.59, contains two instances of -sya in distinct grammatical roles. The first -sya is derivational — the suffix embedded in the compound matsya itself, encoding the relational meaning 'of/from MA-.' The second -sya is inflectional — the genitive case ending added to the entire word matsya to produce 'of the matsya.' If -tsya were a unitary suffix with no internal structure, the form matsyasya would be morphologically opaque — a mysterious double appearance of an identical phonological sequence with no explanation. But if matsya = MA- + -t- + -sya (derivational), then matsyasya = MA- + -t- + -sya(derivational) + -sya(inflectional) — a transparent, compositionally regular form in which the derivational and inflectional suffixes occupy distinct and non-competing morphological slots. The ungrammaticality of *matsyasyasya (which would result from adding a second inflectional genitive) demonstrates that the two -sya suffixes are structurally differentiated: one is lexically fused into the stem, the other is a case marker. This self-sealing pattern is diagnostic of a word in which -sya is the derivational suffix the paper proposes.

The Indus script de-affrication chain and Prakrit colloquial register provide the final corroboration. Sanskrit matsya corresponds in the vernacular register to Pali/Prakrit maccha — not a word from a different language, but the same word in the folk register of the same language (Pischel, 1981). The phonological trajectory is: matsya → affricate simplification of the -ts- cluster → maccha (with gemination and palatalization). This simplification is exactly what the Indus script decipherment independently documents for the archaic -tsu: the de-affrication chain -tsu → -su is explicitly attested in paired readings across the Indus corpus (Scott Dunn, 2026, pp.

100–101). The Indus script therefore preserves the -ts- cluster in its archaic affricated form, Sanskrit preserves it in the medial cluster of matsya, and Prakrit maccha independently shows the same simplification trajectory that Indus de-affrication documents in proto-literate script. Three independent attestations — Indus graphemic, Sanskrit phonological, and Prakrit colloquial — converge on the same consonant cluster history, confirming that the -ts- in matsya is not an accident of transmission but a durable phonological feature of the morpheme. See §10.2 for the full cognate chain.

4.3 The Compound Reading: MA + TSYA = “of/from [the act of] bringing into manifested form”

Synthesizing the morphological analysis, the compound reading proposes: *MA* (root of manifestation, measurement, bringing into bounded form) + *TSYA* (archaic existence-marker suffix, encoding the state of being-as-entity) = *MA-TSYA* = "that which has manifested into existence" = "of [manifested/physical] form." This reading satisfies four criteria that together constitute a strong philological argument. First, it is morphologically parseable using attested Vedic morphological processes — both the *MA* root and the *-tsya* relational formation (liaison -t- + suffix -sya) are documented features of PIA dialects as alveolar sibilant affricates such *ts* and *dz* are common.. Second, it is semantically coherent with the cosmogonic context of the first avatar: a name meaning “of/from [the act of] bringing into manifested form” is precisely appropriate for the avatar that designates the primordial cosmogonic event of first manifestation. Third, it is methodologically consistent with Yaska's multi-derivational approach, which explicitly endorses the pursuit of cosmogonic semantic layers beneath the surface of Vedic vocabulary. Fourth, it does not require positing an unknown or morphologically irregular process: the compound structure *MA + TSYA* follows recognizable patterns of Vedic nominal derivation.

The conventional "fish" translation, by contrast, requires mapping a zoological referent onto a morphologically opaque compound without satisfactorily explaining the compound's internal structure. The root proposed for the "fish" reading — *mats-*, glossed as "to glisten" — is not independently attested as a robust Vedic verbal root, and the semantic path from "to glitter" to "fish" (by way of fish scales) is an ad hoc rationalization rather than a systematic morphological derivation (Monier-Williams, 1899). The *MA + TSYA* reading offers a more principled and philosophically richer account of the term's origin.

5. Comparative Morphology

5.1 Parallel Compound Structures in Vedic Sanskrit

The morphological type proposed for *MA-TSYA* — a productive Vedic root combined with an existence- or entity-marking suffix to designate a being belonging to a particular ontological category — is not without parallels in the Vedic and early Sanskrit lexicon. A comparative survey of structurally analogous forms illuminates both the plausibility and the elegance of the proposed reading. The Vedic compound *brahma-nya* designates not merely something "relating to Brahman" in a loose sense but specifically "one who exists as or within the category of sacred speech" — it is an entity-noun produced by applying the nominalizing *-ya* suffix to a quality or substance root. Similarly, *rāj-anya* — a term for the warrior-noble class — does not merely mean "relating to kingship" but "one who exists as a king-category being," an entity-designating noun produced by the same morphological operation. The abstract noun *deva-tā* ("divinity," "deity-hood") uses the suffix *-tā* (cognate to the existence-nominalizing *-t-* cluster) to produce "that which exists as divinity."

Most illuminating of all is the compound *svayam-bhu*, a name for Brahma meaning "the self-existent one" — literally, "that which has come into existence by itself." *Svayam-bhu* encodes self-manifestation into existence: the divine's capacity to arise into being without

external cause. This is precisely what *MA-TSYA* encodes in compound form: the manifestation (*MA*) into existence (*TSYA*) of the first entity. The first avatar as *MA-TSYA* and the creator god as *svayambhu* are thus cosmologically parallel designations, differing only in the directionality of their ontological claim: the creator is self-manifested; the first avatar is the first-manifested. Together, these parallels situate the proposed reading of *MA-TSYA* within a documented Vedic morphological and cosmological tradition of entity-naming through existence-encoding compounds.

5.2 Cross-Register Attestation of the -sya Relational Suffix

Table 1 presents a morphological comparison of Sanskrit terms in which an existence-root or productive quality-root is combined with a nominalizing suffix to produce an entity-designating noun, situating *MA-TSYA* within this recognized Vedic morphological pattern.

Table 1

Morphological Comparison of Existence-Marking Compound Formations in Vedic Sanskrit

Evidence	**Form / Attestation**	**Analysis**	**Significance for MA-TSYA Thesis**
Primary parse of matsya	matsya	MA- (√mā: manifest, measure, bring into form) + -t- (liaison) + -sya (relational suffix, PIE *PIE *-yos-)	"Of/from [the act of] bringing into manifested form" — a cosmogonic ontological designation, not a zoological term
Avestan cognate masyō	Avestan masyō (fish)	MA- + -syō with NO epenthetic -t-; the Avestan form does not interpose a liaison consonant	Proves that the -t- in Sanskrit matsya is a liaison consonant at the morpheme boundary, not a root-final radical inherited from PIE
Sanskrit pronoun genitive paradigm	tasya / kasya / yasya / asya	ta- + -sya / ka- + -sya / ya- + -sya / a- + -sya	-sya is a productive relational suffix (PIE *PIE *-yos-) meaning "of / belonging to"; the identical suffix is operative in matsya

Evidence	Form / Attestation	Analysis	Significance for MA-TSYA Thesis
matsyasya self-seal	matsyasya (genitive of matsya)	matsya + -sya (genitive case ending) → matsyasya ("of the matsya")	When -sya is applied to matsya as a genitive inflection, the result confirms matsya is a complete nominal stem — not a suffix-initial form, vindicating the MA- + -TSYA segmentation
Indus fish sign rebus MI- → MITR/MITRA	Fish pictograph → MI- → MITR/MITRA (Scott Dunn, 2026, pp. 52, 101)	Fish pictograph = mīna; rebus extraction yields first syllable MI-; MI- + slash sign modifier = MITR	The Indus script's rebus system proves the Indus word for fish was mīna (MI-), not matsya (MAT-); if matsya were the fish word, the rebus would yield MAT-, not MI-
Indus -tsu/ Sanskrit -tsya	Indus -tsu / Sanskrit -tsya	Base root + -tsu (existential; affricated archaic form); de-affrication: -tsu → -tsya in Sanskrit	Confirms the -ts- cluster is an archaic morpheme-boundary artifact preserved in both Indus graphemic practice and Sanskrit phonology; validates the -TSYA segmentation
Colloquial register de-affrication	matsya → maccha (colloquial / folk register of Sanskrit)	Archaic -ts- cluster simplified to -cch- in colloquial spoken Sanskrit; the cosmogonic term is preserved only in the learned register	Confirms -ts- is an archaic cluster at a morpheme boundary; colloquial speakers retained simplified maccha, while the priestly register preserved matsya with full morphological structure
Liaison -t- as boundary consonant	MA- + -sya → *māsya → matsya	Epenthetic -t- inserted at morpheme boundary between vowel-final MA- and sibilant-initial -sya; the sequence ā + s is resolved by the liaison consonant	Explains -t- as a regular Sanskrit phonological boundary phenomenon, not a root radical; Avestan masyō (no -t-) shows the liaison is language-specific
Falsification of conventional *mats- + -ya	Conventional parse: *mats + -ya	If -ya were the suffix, a root *mats meaning "fish" would be required; no such root exists in any cognate PIE language, and Avestan masyō shows no such radical	The conventional parse leaves root *mats without a PIE etymology; the MA-TSYA segmentation resolves this by anchoring the form in well-attested √mā and PIE *PIE *-yos- relational suffix

Note. The morphological pattern of existence-root + nominalizing suffix producing an entity-designating noun is attested across the Vedic Sanskrit lexicon. *Satya* (truth) — deriving from *sat* (being/existence) + *-ya* — is the clearest demonstration of the pattern: existence-root + nominalizer = entity/truth-noun. *MA-TSYA* follows this exact pattern, with the *MA* root encoding manifestation and the *-tsya* suffix encoding existence-as-entity. The penultimate row extends this evidence into the proto-literate record: the Indus script corpus documents productive *-tsu* (the affricated archaic form of Sanskrit *-su*, explicitly identified as such in Scott Dunn, 2026, p. 100) with attested de-affricated Sanskrit cognates for every documented instance (*tsubhu/subhu*, *tsuya/suya*, *atsu/asu*, *ditsu/ditsā*, *pitsu/pitsā*). The addition of the *-ya* nominalizer to *-tsu* yields *-tsya*, and Sanskrit independently preserves the *-ts-* cluster in *ditsā*, *pitsā*, and *satsu* — confirming the consonant cluster's phonological reality across two independently documented strata of the language. See §11.2 for the full cognate chain. The colloquial-register form *maccha* independently confirms the archaic status of the *-ts-* cluster through its affricate simplification trajectory (*matsya → maccha*). Calling *maccha* a ‘cognate’ of *matsya* is a misnomer: Prakrit is not a separate language but the folk/vernacular register of the same language, with Sanskrit as its priestly/royal register — making *maccha* the same word in a different register, not a word from a different tongue. This simplification corroborates the Indus script de-affrication evidence in §11.2.

The table demonstrates that the morphological operation proposed for *MA-TSYA* is not an isolated or anomalous claim but an instance of a recognizable and productive Vedic pattern. Most notably, the parallel between *satya* (existence-root *sat-* + nominalizer *-ya* = "that which is / truth") and *MA-TSYA* (manifestation-root *ma-* + existence-marker *-tsya* = “of/from [the act of] bringing into manifested form”) demonstrates that the morphological type — existence- or quality-root plus nominalizing suffix producing an entity-designating noun — is a recognized and well-documented Vedic Sanskrit word-formation strategy.

5.3 Reassessing the Etymology of *Massagetae*: Correcting a Century of Misinterpretation Through the MA-TSYA Reconstruction

The ethnonym *Massagetae* (Gk. Μασσαγέται) has long posed difficulties for Indo-Iranian historical linguistics. Traditional interpretations derive the name from an alleged East Iranian compound *masi̯a-ka-tā*, glossed as "fish-eaters" or "fish-people" (Schmitt, 1998, 2000). This reading depends on identifying the first element with Young Avestan *masiia-* "fish" and the second with an East Iranian plural suffix *-tā*. However, both assumptions are linguistically unsound. As Harmatta (1999) correctly observed, *masiia-* is not the primary Avestan term for "fish," nor does the ethnonym's second element correspond to *-ka* or *kapa* ("fish"), as sometimes proposed. Instead, the evidence points toward a far older Indo-Iranian compound whose meaning has been obscured by later semantic confusion.

Harmatta's Breakthrough — and His Final Misstep

Harmatta's (1999) most important contribution was recognizing that Avestan *mašya* / *masyō* does not mean "fish," but "man, mortal." This aligns directly with the Proto-Indo-Iranian (PII) adjective \masyo-* (Mayrhofer, 1992–2001; Lubotsky, 2001). *In this paper, the author proposes that* \masyo- itself derives from the Proto-Indo-European (PIE) form \meh₂-yos, reconstructed here as meaning "that which is manifested, measured, or brought into form. In Indo-Iranian cosmology, manifestation implies embodiment, and embodiment implies mortality; thus *mašya-* naturally develops the meaning "mortal human" (Hoffmann & Narten, 1989).

However, Harmatta's reconstruction stalled when he attempted to explain the second element of *Massagetae*. Although he correctly rejected the "fish" etymology, he nevertheless forced the final morpheme into *-ka* or *-tā*, missing the Indo-Iranian lexeme that actually matches the Greek spelling: gata / gāθā, "hymn, sacred song" (Insler, 1975). This oversight prevented him from completing the reconstruction he had nearly solved.

The Misidentification of Gata: A Systematic Error

The Greek ending -getae / -gétai corresponds phonetically not to Iranian *-ka* or *-kapa*, but to gata / gāθā, the well-attested Indo-Iranian term for "hymn, verse, sacred song." Sanskrit *gāthā* and Avestan *gāθā* share a common Old Iranian ancestor \gāta-*, making the Greek rendering entirely expected (Bartholomae, 1904; Insler, 1975). The repeated scholarly substitution of *gata* with *ka* or *kapa* is therefore a category error: a misreading of Greek phonology combined with an incorrect assumption about the semantics of *masiia-*.

Once *gata/gāθā* is restored to its proper place, the ethnonym becomes transparent.

The Correct Reconstruction

Combining the PII adjective \masyo-* ("manifested, embodied, mortal") with Old Iranian \gāθā* ("hymns, sacred songs") yields:

> *Proto-Iranian:* \masyo-gāθā* Meaning: "the embodied hymns," "the mortals of hymns," or "the people of song."

Greek accurately renders this as Massagétai, with ge- reflecting Iranian ga- / gā- and -tai reflecting Iranian -tā, the expected plural ending. This reconstruction is semantically coherent, morphologically regular, and consistent with Indo-Iranian ritual culture, in which hymns (*gāθās*) are conceived as living, embodied, and cosmologically potent (Insler, 1975; Witzel, 2001).

Integration with the MA-TSYA Reconstruction

Crucially, the PII form \masyo-* is the same root underlying Sanskrit **matsya**, once the Indo-Aryan liaison consonant *t* is added in Proto-Indo-Aryan (PIA):

Stage	**Form**	**Meaning**
PIE	\meh₂-yos*	"manifested, measured, formed"
PII	\masyo-*	"embodied, mortal"

Stage	Form	Meaning
PIA	\matsya-*	“manifested form [an avatar]”
Avestan	mašya / masyō	“mortal human”
Sanskrit	matsya	“manifested avatar” (later “fish”)

This unified lineage demonstrates that *matsya* (MA-TSYA) is not originally zoological but cosmological: a term denoting manifestation into embodied form. The Avestan *mašya-* preserves the “mortal” branch of the semantic field, while the ethnonym *Massagetae* preserves the ritual-poetic branch (“embodied hymns”). Dravidian *min* (“to be, to appear”), borrowed from Sanskrit *mīna* but retaining the same radiance-manifestation semantics, completes the cross-linguistic arc.

Why the BMAC Hypothesis Collapses

Because *masyō* and *Massagetae* can be reconstructed internally from PIE → PII → Iranian morphology, the long-standing claim that these terms derive from a BMAC substrate (Harmatta, 1999; Witzel, 2001) is unnecessary. The “fish” interpretation arose from a Younger Avestan semantic confusion, not from an external loan. Once the correct PIE root and the correct Iranian morpheme (*gāθā*) are restored, the ethnonym is fully Indo-Iranian and fully cosmological.

Thus, the ethnonym *Massagetae* is not “fish-eaters,” nor is it a BMAC loan. It is an Iranian compound \masyo-gāθā*, “mortals/people of song,” directly parallel to Avestan *mašya-* (“mortal human”) and Sanskrit *matsya* (“manifested/physical form”). Harmatta correctly identified the first element but misidentified the second; once corrected, the ethnonym becomes a powerful piece of evidence supporting the MA-TSYA reconstruction and the broader Indo-Iranian cosmology of manifestation, embodiment, and mortality.

6. Contextual Evidence from Vedic and Post-Vedic Texts

6.1 Matsya in the Shatapatha Brahmana

The earliest datable narrative of *Matsya* appears in the *Shatapatha Brahmana* (1.8.1.1–1.8.1.10), a prose ritual text of the Yajurveda tradition composed approximately between the ninth and sixth centuries BCE (Shastri, 1970). The narrative is well known but its structural logic repays close attention in light of the morphological argument presented above. Manu performs his ritual ablutions and in the water that runs through his hands finds a tiny fish — almost imperceptibly small. The fish identifies itself, warns of the coming flood, and instructs Manu to preserve it, keep it in successively larger containers as it grows, and finally build a boat. The fish grows: first it fills a jar, then a tank, then the rivers, and finally the ocean itself. At the moment of the flood, the now-immense fish tows Manu's boat to the mountain of the north, where it runs aground, and all is saved.

The structural logic of this narrative is not zoological but ontological. The fish begins as the minimal existent — barely perceptible, barely there — and expands through successive stages until it encompasses the entirety of the manifest world, guiding the vessel of human civilization through the chaos of undifferentiated waters to safety. This trajectory — from the barely-existent to the maximally-existent — is precisely the ontological trajectory described in the Vedic cosmogony: from the first emergence of *sat* from *asat* to the full elaboration of the manifest cosmos. When *Matsya* is parsed as *MA-TSYA* — "of/from [the act of] bringing into manifested form" — this structural logic becomes transparent: the narrative of the growing fish is a cosmogonic narrative of expanding existence, and the first avatar is the firstness of existence itself, the primordial *sat* that guides the human world through the chaos of *asat*.

6.2 Matsya in the Mahabharata and Puranas

The *Matsya Purana* and the *Bhagavata Purana* (8.24) elaborate and, in certain respects, reframe the Matsya narrative. In these later texts, Vishnu takes the form of *Matsya* not only to save Manu from the flood but specifically to rescue the Vedas — the totality of sacred knowledge and cosmic order — from the demon Shankhasura, who has stolen them during the primordial chaos. The Vedas, in Vedic cosmological thought, represent structured divine knowledge, the pattern of cosmic *rta* (order, truth, the right arrangement of the real) that underlies the coherence of the manifested world. Their theft by the demon of chaos represents the dissolution of the pattern of existence into undifferentiated non-being. Their rescue by the first avatar represents the restoration of cosmic order — *sat* — from chaos — *asat*.

This is precisely what a "of/from [the act of] bringing into manifested form" does: it instantiates order-through-form in the face of formlessness. The fish — *MA-TSYA* — is not retrieving scrolls from a subterranean demon's lair, as a literalist reading might suggest, but reinstating the principle of manifested, ordered existence over the chaos of non-being. The Puranic elaboration of the Matsya narrative, far from complicating the *MA-TSYA* reading, deepens it: it is precisely because *Matsya* is the manifested existent entity that it is capable of rescuing the Vedas, because the Vedas are themselves the pattern of existence — the structure of *sat* — and only that which first manifests into being (*MA-TSYA*) is the appropriate agent of their restoration.

6.2.1 Two Siblings Born of the Fish

The Mahābhārata, Ādi Parva (Ganguli trans., 1883–1896, Book 1, Ch. 63) preserves an episode of profound morphological importance. An apsara named Adrikā is cursed to live in fish form. Two fishermen cut open the fish and discover two human children within — a boy and a girl born from the fish's body. The boy is named Matsya and goes on to found the Matsya kingdom,

one of the sixteen mahājanapadas of ancient India. The girl is named first Matsyagandhā ("she who carries the trace of the fish") and later — after her transformative life-events — Satyavatī.

Under the conventional reading, the boy's name simply means "fish," and the Matsya kingdom is a "fish kingdom" — an obscure regional designation with no further significance. Under the MA-TSYA reading, the names become semantically transparent and philosophically coherent. The boy named Matsya — "manifested existent entity," "that which has crossed from the unmanifest into form" — is he who has literally emerged from the body of a fish into human existence: the child born from within the fish is the entity that has passed through the boundary of manifestation. The Matsya kingdom, then, is not a kingdom named after a fish but a kingdom constituted by manifested, formed existence — an ontological rather than zoological designation. The Pāṇḍavas' choice of the Matsya kingdom for their year of incognito exile in the Mahābhārata carries precisely this resonance: they conceal themselves in the kingdom of manifested form, hiding in plain sight within the domain of the manifested world.

The girl's name carries an even more precise morphological argument. Matsyagandhā, her birth name, uses the zoological register (matsya in its fish sense) as a metonymic descriptor. But her mature name, Satyavatī, parses identically to the paper's analysis of matsya itself: sat (existence, being) + -ya (PIE *-yos-, relational suffix) + -vatī (feminine possessive suffix, "she who possesses") = "she who possesses that which is of/from existence" = "she who embodies truth/existence." The morphological parallel is exact: matsya = MA- (manifestation root) + relational -tsya (PIE *-yos-); satya = sat- (existence root) + relational -ya (PIE *-yos-). The two sibling names together encode a cosmogonic sequence: the boy's name marks the MA-event (manifestation, the crossing from unmanifest into form), and the girl's mature name marks the SAT-event (existence, the being that has fully come to be). The Ādi Parva narrative has preserved, in the form of a genealogical story, the full cosmogonic sequence that the paper identifies in the morphological structure of matsya: MA-manifestation → SAT-existence.

The Ādi Parva episode is not, on this reading, a charming folk etiology for a regional kingdom name. It is a narrative encoding of the ontological transition that matsya originally designated — translated from morphological abstraction into the concrete terms of human birth, naming, and kinship. The fish that contains the two children is the liminal medium through which they pass from the aquatic, formless domain (asat) into the structured, named, human world (sat). The names given to the children record what that passage means: MA-TSYA = the manifested one; SAT-ya-vatī = she who embodies existence. The cosmogonic grammar has been preserved, improbably but unmistakably, in a genealogical story.

6.3 The Dashavatara as Ontological Sequence

The ten avatars of Vishnu, conventionally enumerated as fish, tortoise, boar, man-lion, dwarf, axe-warrior, Rama, Krishna, Buddha, and Kalki, have been subject to considerable interpretive speculation, most controversially the popular claim that they anticipate or map onto Darwinian evolutionary biology. This reading is anachronistic, methodologically inconsistent with the theological and philosophical tradition that produced the avatar doctrine, and — as will now be argued — unnecessary: the sequence makes far better philosophical sense as an ontological curriculum than as a biological chronology. If *Matsya* originally designated "manifested existent entity," the sequence can be read as follows.

Matsya (*MA-TSYA*): the first and most minimal mode of manifested existence — pure existence-with-form, the bare fact of being something rather than nothing. *Kurma* (tortoise): existence that withdraws into itself, that contains and preserves — being as interiority and self-enclosure, the cosmos becoming stable enough to be turned as a churn. *Varaha* (boar): existence that acts upon the world — being that retrieves, rescues, and restores; the divine as active engagement with the fallen or submerged earth. *Narasimha* (man-lion): existence at the boundary of categories — being that cannot be classified by the ordinary taxonomy of the real,

the divine that erupts through the limits of conventional form. *Vamana* (dwarf): being that measures, reclaims, and re-orders — notably, *vā-māna* carries clear etymological resonance with *māna* (measure), connecting the fifth avatar to the same root-cluster as *MA* itself, suggesting that the sequence returns here to the theme of measurement-into-being at a more socially articulated level. *Parashurama*: being that acts with force and moral necessity in the historical world — existence as warrior discipline and cosmic correction. *Rama*: being as ethical ideal — the perfect king, the fully realized moral individual. *Krishna*: being as wisdom, cosmic play (*lila*), and philosophical depth — existence at the level of consciousness grasping its own nature. *Buddha*: being as pure, compassionate consciousness — existence at the level of awareness that has seen through the structures of the conditioned world. *Kalki*: being as eschatological completion — existence at the level of the final restoration of cosmic order at the end of the cycle.

This sequence moves from pure existence-with-form (*Matsya*/*MA-TSYA*) to maximally refined, completed, and eschatologically perfected existence (*Kalki*). It is an ontological curriculum traversing the full range of modes of divine being-in-the-world, from bare existence to moral perfection. This reading makes conceptual and philosophical sense if and only if *Matsya* means "manifested existent entity." A biological fish as the first step of an ontological sequence is philosophically incoherent; a “of/from [the act of] bringing into manifested form” as the first step is philosophically elegant and structurally necessary.

7. Implications for Vedic Cosmology

7.1 The Primordial Act of Manifestation

The cosmogonic significance of the *MA-TSYA* reading is deepest when situated within the full tradition of Vedic reflection on the primordial act of manifestation. The Nasadiya Sukta (*Rigveda* 10.129) poses the question of origin without fully answering it, gesturing at a state

prior to both being and non-being from which being first arose. The *Aitareya Upanishad* (1.1.1) — translated and annotated in Olivelle (1998) — opens with a statement that comes as close as any ancient text to designating the moment of first manifestation: "In the beginning, this (*idam*) was *Atman* alone." The demonstrative *idam* — "this," the primordial gesture of designation — is the linguistic marker of the fact of existence: it says that something is there, that the real is present, that being has arrived. It is the linguistic equivalent of the morphological structure *MA-TSYA*: the manifest (*MA*) existent (*TSYA*), the demonstrable fact that something has come into being.

In this cosmological frame, the first avatar is not a creature that Vishnu chose to inhabit for narrative reasons. It is the Vedic cosmogonic event itself, personified and given the name of the operation it performs: *MA-TSYA*, the manifested existent entity, the primordial *sat* that arises from *asat*, the first this that emerges from the undifferentiated that. The avatar doctrine, *avatāra* — literally "crossing down," the descent of the Absolute into the manifest world — begins at the most fundamental level: not with a specific form, not with a moral mission, not with a divine persona, but with the bare fact of descending into manifestation at all. *MA-TSYA* is the first avatāra because it is the first manifestation, the first crossing of the threshold from the unconditioned Absolute into the world of conditioned being.

7.2 Matsya and the Waters: Apas and Existence

The primordial waters in which *Matsya* swims are not a narrative backdrop but a cosmologically precise element of the tradition. In Vedic cosmology, the primordial waters (*āpas*) are the medium of undifferentiation — the state of non-being as pure potentiality from which being emerges. The *Rigveda* (10.129.3) expresses this directly: "Darkness was hidden by darkness in the beginning; all this was one undifferentiated sea (*salila*)." The undifferentiated sea (*salila*) is

the state of *asat* — not empty nothingness but undifferentiated fullness, the condition prior to any particular thing. From this undifferentiated sea, the first differentiated existence arises.

Matsya swimming in the primordial waters is therefore, in the cosmological reading, the first manifested entity (*MA-TSYA*) navigating the medium of pre-existence — the first *sat* moving through *asat*. This is not merely a compelling metaphor; it is a cosmogonically precise image. The entity that has just manifested into being is necessarily still surrounded by the non-being from which it arose — just as a fish is surrounded by water. The first manifested existent is embedded in the medium of the unmanifest, navigating through it, surviving it, and ultimately guiding the human world (represented by Manu) through the undifferentiated chaos to the firm ground of sustained, ordered existence. The cosmological precision of this image is intelligible only if *Matsya* means what the morphological analysis proposes: the manifested existent entity navigating the sea of the unmanifest.

7.3 Connections to Other Research by Jessica Scott (Dunn)

The argument advanced in this paper does not stand in isolation but connects at multiple points to the broader research program of the present author. *Eden Remembered* (Scott, 2025a) identifies a primordial sacred landscape from which multiple ancient traditions draw their cosmological orientation, arguing that the geographical and conceptual substrate of these traditions shares a common point of origin from which their distinctive features radiate. The present paper's identification of *Matsya* as the “of/from [the act of] bringing into manifested form” — the ur-cosmogonic event from which the Dashavatara sequence descends — aligns with this framework: the first avatar is not a local or culturally specific mythological figure but a designation for the primordial cosmogonic act itself, the emergence of manifested existence from undifferentiated potential, an event whose conceptual traces appear across multiple ancient

traditions precisely because it names a universal ontological threshold rather than a particular cultural narrative.

Restoring the Sacred Axis (Scott, 2025b) from her book *The Sacred Mountain of Haoma and Soma* grounds the linguistic argument in the shared Indo-Iranian homeland, identifying Falak Sar in the Swat Highlands as the axis mundi common to the Vedic and Zoroastrian traditions and arguing that the linguistic and cosmological convergences between these traditions are explicable as products of a shared geographical, cultural, and intellectual origin. The present paper's comparative linguistic evidence is intelligible in precisely this framework: in the shared Indo-Iranian homeland, where the transition from non-being to being was the fundamental ontological event, the naming of the first avatar after the concept of manifested existence is precisely what one would expect from a tradition whose deepest cosmological concerns centered on the nature and origin of the real.

In her 2026 article, *Preliminary Observations on Symbol Correspondence Between the Vinca and Indus Sign Systems: including Decipherment of Indus Script* cited in her book *The Decipherment of the Indus Script*, Scott Dunn makes the structural argument about ancient sign systems: that Indus inscriptions use paired-base formations and modified-base constructions to generate layered, compound meaning — that the sign system is not a simple linear encoding of sounds or objects but a morphologically complex system in which base signs are modified and compounded to produce nuanced semantic content. The structural argument of the present paper is a direct linguistic parallel: *MA + TSYA* is exactly such a compound formation — a base sign (*MA*) modified by a suffix (*TSYA*) to produce a layered semantic content ("of/from [the act of] bringing into manifested form") that is not recoverable from either alone. Ancient sign systems, whether graphemic or phonological, use compound structures to encode layered meaning; the morphological argument of this paper is an instance of the same principle operating in the phonological domain.

8. Counterarguments and Responses

8.1 The Standard Derivation of Mina

It is important to present the mainstream position with full fairness and precision. Monier-Williams (1899), in the most widely used Sanskrit-English dictionary in the modern period, lists *matsya* under the headword "fish" without providing a complete morphological derivation, implicitly treating the term as a primary nominal of uncertain root. The *Sanskrit-Wörterbuch* of Böhtlingk and Roth (1855–1875) — the most comprehensive historical Sanskrit dictionary produced in the Western philological tradition — similarly lists the *mina* under "fish" and suggests a possible derivation from a root associated with gleaming or glistening, to connect the term to the appearance of a fish's scales.

The fracture of the conventional analysis is most acutely visible in the competing folk etymologies offered by Yāska himself, the founding authority of Sanskrit etymological inquiry. In the *Nirukta*, at 6.26, Yāska records two irreconcilable derivations: (1) fish are called *matsya* because “they float in water” — a derivation he constructs from √*syand* (to flow, to float) and *madhu* (water/sweetness); and (2) fish are called *matsya* because “they revel in eating each other” — a derivation from √*mad* (to rejoice, to be intoxicated) with a behavioral gloss (Yāska, *Nirukta* 6.26; Sarup trans., 1921). These two etymologies cannot both be correct: they parse the same word from different roots producing incompatible morphological analyses. A third variant, proposed by Monier-Williams (1899) and R. Franco following the √*mad* reading, renders *matsya* as “the joyous one” — yet another incompatible gloss from the same etymological family. Three contradictory folk etymologies offered by the tradition’s own leading authorities by the sixth century BCE are not evidence of a word that has been well understood. They are evidence of a word whose original meaning had become semantically opaque — the classical signature of a cosmogonic term that had drifted from its technical register into common parlance. A word with

a transparent meaning does not attract competing derivations from different roots. The dispersion of folk etymological attempts is itself diagnostic: it tells us the tradition had lost access to the morphological reasoning that produced the word.

The term *mīna* was borrowed directly into Proto-Dravidian, where the final -a was dropped, producing the form *min*. Proto-Dravidian did *not* originally possess a root *min* meaning "to shine" or "to glitter"; rather, this radiance-based semantic field entered Dravidian *through the borrowing itself*. At the time of borrowing, Sanskrit *mīna* carried a semantic association with gleaming or glistening appearance — an association even noted by Böhtlingk and Roth, who suggested a connection between *mīna* and a root meaning "to gleam, to glisten," presumably referencing the reflective quality of fish scales.

Once borrowed, Dravidian *min* retained this radiance-based semantic field, and in Central Dravidian (Parji) the term underwent a natural ontological extension: "to shine" → "to appear" → "to manifest" → "to be." This semantic evolution is not accidental but cosmologically patterned, reflecting the same manifestation logic underlying the Sanskrit compound *MA-TSYA*, where the avatar emerges from luminous waters as the first form of being. Thus, the Dravidian development of *min* → "to be" is a direct continuation of the radiance-manifestation ontology embedded in the Indo-Iranian semantic field at the time of borrowing.

Importantly, the shining/glittering meaning in Dravidian is not native but *derivative of Sanskrit mīna*, and the ontological expansion in Parji represents a culturally coherent evolution of the borrowed term rather than an inherited Proto-Dravidian root. This corrected understanding removes the false assumption of an independent Dravidian "shine" root and restores the proper historical sequence: Sanskrit *mīna* → Proto-Dravidian *min* → Parji *min* ("to be").

8.2 The Fish in Vedic Culture

A second counterargument might hold that fish imagery is sufficiently prevalent in Vedic and post-Vedic culture to make a zoological derivation for *matsya* naturalistically plausible: fish appear in ritual texts, in dietary regulations, in metaphors and similes across a range of Vedic literature, and the cultural salience of fish as an object in the Vedic world is not in dispute. However, the cultural salience of an object does not determine the etymology of the term that names it. The presence of fish in Vedic culture establishes that fish were known and culturally significant; it does not establish that *matsya* was formed by naming them through a root meaning "fish" or "to glitter" (*mina* is not structurally derivative of *Matsya)* Loanwords and semantic drift — including the process by which a cosmogonic term becomes anchored to a zoological referent — can explain how a term originally designating a cosmogonic concept came to be used primarily for the most prominent cultural vehicle of that concept. Yaska himself, in the *Nirukta* (1.15–1.20; Sarup, 1967), explicitly acknowledges that words carry multiple derivational layers and that the surface meaning in common usage need not exhaust the morphological history. The *MA-TSYA* reading does not require the "fish" layer to be linguistically false; it proposes that the fish became the vehicle for a cosmogonic concept whose original morphological designation was *MA-TSYA*.

8.3 The Argument from Usage

The most serious counterargument is the argument from usage: in all attested uses of the term *matsya* across Vedic and post-Vedic texts, the word functions as a common noun meaning "fish" or as a proper designation for the first avatar understood as a fish. If the word means “of/from [the act of] bringing into manifested form” in its morphological structure, why does it always appear to mean "fish" in its usage? The answer lies in the well-documented historical linguistic

process of semantic narrowing (Bloomfield, 1933). Semantic narrowing — the process by which a term of broad or abstract meaning becomes restricted to a narrower or more concrete referent — is one of the most common mechanisms of semantic change in the history of languages. The word *virtue*, for instance, derives from Latin *virtus*, meaning "the quality of being a man" (*vir*), but has narrowed to designate moral excellence specifically. The word *disaster* derives from Italian *disastro*, meaning "ill-starred event" (from *dis-* + *astro*, "star"), but has narrowed to designate any major catastrophe. The narrowing of a cosmogonic term — “of/from [the act of] bringing into manifested form” — to its most salient cultural vehicle — the fish — in a culture where fish served as the primary narrative vehicle for the concept is entirely consistent with the documented mechanisms of semantic change. As cosmogonic context was lost, as the philosophical depth of the naming convention was forgotten in favor of the narrative immediacy of the fish story, the term narrowed to its vehicle. This is not a surprising or anomalous outcome but a typical one in the history of sacred vocabulary becoming common vocabulary.

A particularly instructive case of this semantic narrowing process — and simultaneously one of the most inadvertent confirmations of the *MA-TSYA* reading in the entire Sanskrit corpus — is found in *Śrīmad-Bhāgavatam* 8.24.59, the final verse of the Matsya narrative in the Eighth Canto. The verse employs the compound *māyā-matsyasya* — the genitive of *māyā-matsya* — in the phrase: *satyavratasya rājarṣer / māyā-matsyasya śārṅgiṇaḥ* ("of the great King Satyavrata and of the fish incarnation [*māyā-matsyasya*], who bore one horn"). Prabhupāda's standard translation renders *māyā-matsyasya* simply as "the fish incarnation" (Prabhupāda, 1988, vol. 8, ch. 24). The question this paper now poses is critical: what does *māyā* mean when applied to the Lord's own avatar form, and why is it there at all?

In Vaiṣṇava theology, the Lord is consistently designated *māyādhīśa* — the master, ruler, and controller of *māyā* — and is never described as being subject to it. The *Bhāgavata Purāṇa* itself states: *māyāṁ vyudasya cic-chaktyā kaivalye sthita ātmani* (2.9.2) — "having set aside

māyā by His own consciousness-potency, He remains established in His own self." The Lord does not act *through* or *as* the deluding cosmic illusion (*mahā-māyā*, the agency that bewilders conditioned souls). This is foundational to Vaiṣṇava systematic theology. If *māyā-matsyasya* meant "the illusory fish" or "the fish of illusion," it would place the Lord's avatar-form within the domain of cosmic delusion — a theologically impossible reading that no Vaiṣṇava commentator has ever accepted.

What, then, does *māyā* designate here? The Vaiṣṇava commentarial tradition — articulated with precision by Śrī Viśvanātha Cakravartī Ṭhākura on *Bhāgavata* 10.1.25 and 10.13.57 — distinguishes sharply between two *māyā*-śaktis. *Mahā-māyā* covers the transcendental reality and displays the material world's appearance; it acts on conditioned souls. *Yoga-māyā*, by contrast, "among the eternal realities, covers some and reveals some" (Viśvanātha Cakravartī Ṭhākura, as cited in Kṛṣṇa Bhakti Site, 2022) — it is the divine creative manifestation-potency by which the Lord enacts His own *avatāra-līlā*, His descents into form. When the *Bhāgavata* applies *māyā* to the Lord's own forms and activities, the tradition specifies unambiguously that this is *yoga-māyā* — the transcendental creative power of divine self-manifestation, not cosmic illusion. *Māyā-matsyasya* therefore means "the Matsya whose appearance was enacted through divine *yoga-māyā*" — that is, the avatar whose entry into form was the creative self-manifestation of the divine.

Now the structural argument becomes unavoidable. *Māyā* in Sanskrit denotes the divine creative power of fashioning, measuring, and manifesting form — the same semantic field as the *MA* root analyzed in Section 3.1 of the present paper (√*mā*, *mātrā*, *māna*, *māyā* — all encoding the act of measuring and delimiting into form). If *matsya* originally encoded *MA* (manifestation) + *TSYA* (existent entity), then *māyā-matsya* is morphologically redundant: it combines *māyā* (divine creative manifestation-power) with *matsya* (the manifested existent entity), producing "the creative-manifestation power as the manifested existent entity" — a tautology. This is

precisely the pattern linguists call pleonastic compounding: redundancy generated by adding to a word a descriptor that the word already contains, because the original meaning of the word has been lost. The *Bhāgavata Purāṇa* author added *māyā* to *matsya* because *matsya* had — by the time of the text's composition (estimated c. 800–1000 CE by modern scholarship, though the tradition claims greater antiquity) — already narrowed semantically toward its zoological referent "fish." But in reaching for *māyā* to restore the cosmogonic meaning that "fish" could no longer carry, the author instinctively reached for the exact semantic field that *matsya* originally encoded in its *MA*-root: divine creative manifestation-power. The *Bhāgavata*'s *māyā-matsya* is thus simultaneously the clearest attestation of semantic narrowing — proof that by the Purāṇic period *matsya* required supplementation to recover its cosmogonic force — and the most inadvertent confirmation that the cosmogonic semantic field the present paper has identified was still alive enough in the tradition to be instinctively retrieved, even if no longer encoded in the base word itself. *Māyā-matsya* is the tradition remembering, in a compound, what it had forgotten in a morpheme.

9. Discussion

9.1 Implications for Avatar Theology

The implications of the *MA-TSYA* reading for the theology of the avatar doctrine are significant and deserve sustained reflection. The doctrine of *avatāra* — derived from the Sanskrit roots *ava-* (down) + *tara* (crossing), meaning "descent" or "crossing down" — is the theological claim that the Absolute, here identified with Vishnu, descends into the manifest world in specific forms for specific purposes. If *Matsya* originally meant "manifested existent entity," then the first avatāra is not the descent into a fish body for the purpose of saving Manu, important as that narrative is

at the cosmogonic level. It is the primordial descent of the Absolute into the first moment of existence itself — the crossing of the threshold from the unconditioned Absolute into the first conditioned, manifest, existent entity. Subsequent avatars represent successive modes of that conditioned existence becoming more complex, more ethically engaged, more fully conscious, and more capable of sustained relationship with the world. The Dashavatara, understood in this frame, is not a series of rescue missions. It is an ontological curriculum — a structured account of the modes through which the Absolute inhabits and progressively illuminates the manifest world, from the bare fact of existence to the eschatological perfection of existence.

9.2 Implications for Vedic Linguistics

The paper's argument foregrounds an underexplored morphological stratum in Vedic Sanskrit: the *-tsya* relational formation (liaison -t- + relational suffix -sya, PIE *-yos-: 'of/from, belonging to'). If this formation can be further documented across the Vedic corpus — if other forms can be identified in which *-tsya* functions as a relational suffix producing entity-designating nouns from quality or action roots — the implications for the reconstruction of Proto-Indo-Iranian morphology are considerable. The morphological history of relational suffix usage in the Indo-Iranian languages is incompletely understood, and the identification of an archaic stratum of entity-nominalizing relational-suffix formation would contribute to a more complete account of how these languages developed their resources for talking about being and beings. This paper is not the occasion for a comprehensive survey of the *-tsya* morpheme across the full Vedic corpus — that is a project requiring the resources of a monograph — but it opens the question and provides a methodological framework within which future investigation can proceed.

9.3 Implications for Comparative Mythology

The reframing of *Matsya* as primordial manifested existence aligns the Vedic avatar doctrine with a cross-cultural pattern of first-emergence mythology that is strikingly widespread. The

Sumerian designation *dingir* — "that which shines from heaven," i.e., the first manifest divine — encodes the concept of the first divine manifestation in terms remarkably parallel to the *MA-TSYA* reading: both designate the first crossing of the threshold from the undifferentiated divine into differentiated, perceivable form. The Egyptian cosmogony of *Nun* — the primordial undifferentiated waters from which the first *Atum* manifests as a mound of earth — parallels the Vedic narrative of *Matsya* swimming in the primordial waters (*āpas*) with striking precision: in both traditions, the first manifest existence arises from undifferentiated waters and is the vehicle of cosmic order's restoration. The Gnostic concept of the *Pleroma* ("fullness") from which the *Logos* descends as the first manifestation into the material world parallels the avatar doctrine's logic of the Absolute descending into the first manifest form. The motif of a first manifested entity navigating primordial waters is cross-cultural; the *MA-TSYA* reading places the Vedic tradition firmly within this global cosmogonic pattern, not as a borrower or imitator but as an independent and in certain respects morphologically more precise articulation of the universal cosmogonic intuition that existence itself — the bare fact of something rather than nothing — is the first and most fundamental divine act.

10. Graphemic Evidence from the Indus Script Corpus: The MA-TSYA Compound in Proto-Writing

This section extends the morphological and textual argument developed in the preceding sections into a new and independent domain: the graphemic record of the Indus script corpus (c. 2600–1900 BCE), as analyzed in Scott Dunn (2026) and as catalogued in Mahadevan (1977). If the compound *MA + TSYA* encodes a cosmogonically fundamental concept — "of [manifested, physical] form" — one would expect to find evidence that both are functionally equivalent to *-TSYA* were operative as productive structural units in the writing system of the civilization most plausibly ancestral to, or contemporaneous with, early Vedic Sanskrit. Three independent lines

of evidence from the Indus corpus, together with one direct inscriptional attestation of the avatar concept itself, support this expectation.

10.1 The MA Sign

Scott Dunn (2026) identifies a sign cluster in the Indus corpus organized around the phonetic value *MA*, encompassing the *Ma*, *Ma-* (as initial syllable in compound signs), *-ma* (as terminal syllable), and *Mha/maha* (augmented variant). This cluster is not merely phonetically productive — it appears in inscriptions carrying explicitly cosmogonic and primordial semantic content. The inscription rendered as "*Pra-madi [Ma Adhi/Ma Adi] hava ba [havavah]*" is translated as "The beginning, the primordial [*MA*], the invocation of water" (Scott Dunn, 2026, p. 47). The identification of *MA* with the primordial — with the first — and its placement in the context of water and invocation locates the *MA* sign precisely in the cosmogonic field the present paper has argued is encoded in the Sanskrit root *MA*: the primordial act of manifestation from water, the emergence of the first existent from the primordial aquatic medium.

The inscription "*Payah ma...*" rendered as "The mother's milk..." further places *MA* in the semantic field of nourishment, origin, and first substance — the *MA* that sustains the newly manifested being. This is consistent with the Sanskrit *MA*-root's dual valence as both manifestation and the maternal or originary principle (cf. Sanskrit *mātr*, "mother"; *māyā*, "the creative power that brings form into being"). The Indus *MA* sign cluster therefore appears to carry the same cosmogonic semantic weight as the Sanskrit root *MA* documented in Section 3.1, suggesting that this semantic field antedates the Sanskrit lexical layer and was operative already in the proto-literate stratum of the Indus-Sarasvatī civilization.

10.2 Tsu and Its Attested De-Affricated Sanskrit Cognates

The second and most structurally decisive line of evidence emerges from Scott Dunn's (2026) identification of *-tsu* marking a mode of being – specifically intent or potential action - rather than an emotional or verbal action (p. 63). Across the Indus corpus, three words forming a productive morphological class share the following: *itsu* ("in a state of intending"), *ditsu* ("a state of readiness or procedural preparation"), and *pitsu* ("a state of offering or presentation"). The paper then makes an explicit phonological statement that is critical for the present argument: "Tsu [affricated form of su, an older form]" (Scott Dunn, 2026, p. 100). The Indus *-tsu*, in other words, is identified by the decipherment itself as the fricative archaic form of the Sanskrit *su* — and the two forms are explicitly documented as alternate readings of the same sign throughout the corpus: the sign rendered as *tsubhu* is glossed as "affricated form of classical *subhu*" (p. 51); *tsuya*/*suya* are given as dual readings of the same grapheme (p. 71); *prassu*/*prasu* similarly alternate. The de-affrication rule is not a hypothesis introduced by the present paper: it is stated in the described paper and demonstrated in the source inscriptions themselves.

Table 9.2

De-Affricated Sanskrit Cognates of Indus -tsu

Indus Form	**De-affricated Form**	**Attested Sanskrit Cognate**	**Meaning**
tsubhu	*subhu*	*subhu* (Sanskrit: bliss, happiness)	Ritual state of bliss (Scott Dunn, 2026, pp. 51, 64)
tsuya	*suya*	*suta* / *su-ya* (Sanskrit: pressed, well-offered)	Sacrificial offering/libation (Scott Dunn, 2026, p. 100)
tsukha	*sukha*	*sukha* (Sanskrit: ease, well-being, happiness)	State of ease or well-being (Scott Dunn, 2026, p. 100)

Note. Column 3 lists the de-affricated Sanskrit reflex of each Indus *-tsu* term, confirming that the cluster was phonologically real in Proto-Indo-Aryan and was retained in attested Sanskrit morphology even as the affricate was simplified.

The functional argument now rests on documented, not proposed, correspondences. The *-tsu* suffix is the affricated archaic form of the Sanskrit *su-* / *-su*, and its three primary instances — *itsu*, *ditsu*, *pitsu* — each have de-affricated cognates attested independently in Sanskrit: *asu* (vital breath), *ditsā* (desiderative of √*dā*, "wishing to give, in a state of readiness to give"), and *pitsā* / *pitr* (presenter, one in the state of offering). The semantic field is consistent across all instances: *-tsu* marks the existential mode or condition of an entity (potential or desire for action), not a process or action (yet). This is precisely the functional description of *-TSYA* proposed in Section 3.2. Indus *-tsu* marks the mode-of-being of an entity; Sanskrit *-TSYA*, on the present reading, marks existence-as-entity. The phonological relationship *tsu ~ tsya* is exact: *-ya* is the Sanskrit nominalizer that would convert the Indus *-tsu* into an entity-designating nominal, following the same productive *-ya*-nominalization process Pāṇini documents for this morphological class (4.1.84ff.; Macdonell, 1910). Furthermore, Sanskrit preserves the *-ts-* cluster independently in *satsu* (locative plural of *sat*, "beings"), *ditsā*, and *pitsā* — demonstrating that the existence-marking consonant cluster was phonologically active in Sanskrit morphology and was not introduced by comparison with the Indus corpus.

The convergence is threefold and independently corroborated. The Indus corpus documents: (1) productive *-tsu* that is the affricated archaic form of Sanskrit *-su*; (2) explicit de-affricated paired readings (*tsubhu*/*subhu*, *tsuya*/*suya*, *atsu*/*asu*) documented in the source decipherment; and (3) a semantic function — marking the existential mode of an entity — that is functionally equivalent to the existence-marking role proposed for Sanskrit *-TSYA*. Sanskrit corroborates all three points through: (1) the de-affricated cognates *asu*, *subha*, *suta*; (2) the preserved *-ts-* cluster in *ditsā*, *pitsā*, and *satsu*; and (3) the *-ya* nominalizer that would, when

added to *-tsu*, produce exactly the entity-nominalizer *-tsya* of the present paper's thesis. *MA-TSYA* therefore parses as: *MA* (manifestation base, attested as a productive cosmogonic syllable in both Indus corpus and Sanskrit) + *TSU/TSYA* (state or entity-nominalizer, attested with its de-affricated cognate chain in both Indus corpus and Sanskrit) = "the manifested-existence entity." The compound's morphological components are documented as independent productive syllables in the writing system of the civilization from which the Sanskrit tradition derives — pushing the evidential base for *MA-TSYA* from the Vedic period (c. 1500–1000 BCE) back to the Harappan mature urban period (c. 2600–1900 BCE), where the de-affrication correspondence chain connects the two layers directly.

10.3 The bhu / a-bhu Dichotomy as Prehistoric Parallel to sat / asat

The third line of evidence concerns what Scott Dunn (2026) identifies as the central ontological dichotomy of the Indus inscriptional corpus: the distinction between *bhu* (manifestation, becoming, entry into form) and *a-bhu* (the UnManifest, non-manifestation, the ontological state prior to form). The paper states explicitly: "*bhu* is best understood as denoting process, specifically: becoming... The term does not refer to a fixed object, but to the act or state of manifestation itself. It encodes transition from non-manifest to manifest condition" (Scott Dunn, 2026, p. 73). The privative prefix *a-* then produces *a-bhu*: "not arisen, not yet embodied... *a-bhu* functions as an ontological term rather than a geographic one" (p. 73).

This *bhu / a-bhu* dichotomy is the Indus-corpus functional equivalent of the Vedic *sat / asat* polarity that the present paper has argued provides the cosmogonic context for the *MA-TSYA* compound. Where the Vedic tradition polarizes *sat* (being, the manifest real) and *asat* (non-being, the unmanifest void), the Indus inscriptional corpus — as decoded in Scott Dunn (2026) — polarizes *bhu* (manifestation-into-form) and *a-bhu* (the UnManifest). Inscriptions such as "*Tiya Yatha Abhu*" — rendered as "Here in the manner of the UnManifest" — and "*Narapati iti*

A-bhu" — "The Lord of Men, Lo! The UnManifest" — demonstrate that the concept of the UnManifest was not only operative but formulaically expressed in the Indus corpus.

For the *MA-TSYA* thesis, this carries a decisive implication. If the Indus corpus already operates with a *bhu / a-bhu* ontological dichotomy that is functionally equivalent to Vedic *sat / asat*, then the conceptual framework into which the present paper places the first avatar — the transition from the unmanifest to the manifest, from *a-bhu* to *bhu*, from *asat* to *sat* — is not a late Vedic or Puranic innovation. It is attested in the proto-literate stratum of the civilization ancestral to the Sanskrit tradition, encoded in the very script that may have transmitted *MA* and *-tsu/-tsya* from which *MA-TSYA* was eventually formed. Furthermore, the fish sign — whose phonetic and lexical value is mīna, not matsya, as established by the rebus evidence in §2.1 — functions as a primary base in two-base compound sign pairings throughout the Indus corpus (Scott Dunn, 2026, p. 15). In the Indus script's two-base compound system, signs are paired such that one sign operates as the primary semantic base and a second sign functions as a modifier. The fish sign (mīna) occupies the primary base position — the semantically dominant, anchoring sign — rather than appearing as a secondary modifier or incidental component. This graphemic structural role is directly significant for the *MA-TSYA* thesis. If the Indus fish sign represented a merely zoological referent, it would not be expected to function as the anchoring base in compound sign pairings: zoological signs in proto-writing systems tend to occupy secondary or qualifying positions relative to ontological or processual base signs. That the fish sign (mīna) is instead the primary base indicates that, at the graphemic level, the fish was already encoded as an ontologically primary category — not a zoological subcategory added as cultural decoration, but the foundational referent around which other signs were organized. This is consistent with the paper's central argument: the fish, in the Indus scribal tradition, carried the weight of a primary ontological designation, and that designation was mīna. The Sanskrit cosmogonic term *matsya* then applied to the fish because the fish was the most culturally salient embodiment of the

primordial existent entity — and the Indus scribal record confirms that the fish was already being treated as a category-anchor, not a category-member, in the proto-writing stratum ancestral to that tradition.

10.4 The Avatar Doctrine in the Indus Corpus: A Conceptual Stratum

A fourth and final observation from the Viṇca-Indus paper warrants explicit registration. Scott Dunn (2026) renders the inscription "*Bhu nama/namah sru shri sva*" as "The Manifest's salutation/name: 'The Transmission of the Auspicious Self'" and notes: "The phrase describes manifestation as the transmission of the deity's own essential being (*sva*) into manifest form (*bhu*), rather than as a simple change of state. While the fully developed doctrine of avatars emerges in the Purāṇas, the Vedic corpus already preserves a conceptual framework in which divine or higher-order entities manifest in form. The present reading, in which manifestation (*bhu*) occurs through the transmission (*sru*) of the self (*sva*), aligns closely with this earlier layer, suggesting that the mechanism underlying later avatar theory was already conceptually established" (p. 73).

This observation, generated independently in the context of Indus script decipherment without reference to the present paper's thesis, precisely corroborates the central claim argued here: that the *avatāra* doctrine — the descent of the divine into manifest form — was conceptually operative in the Indus-Sarasvatī civilization; that manifestation (*bhu* / *MA*) was already a technical term for this process in the proto-literate record; and that the first avatar's designation as *MA-TSYA* ("the manifested existent entity") reflects not a late Puranic coinage but a primordial cosmogonic concept with roots reaching into the oldest stratum of attested South Asian writing. The graphemic record and the Sanskrit morphological record converge on a single conclusion: *MA-TSYA* names the primordial act of divine self-manifestation into existence, and

that naming was already in place — already structurally encoded — millennia before the Puranic tradition gave it the form of a fish.

11. Conclusion

This paper has argued that the Sanskrit compound *matsya*, conventionally translated as "fish" and employed as the designation of the first of Viṣṇu's ten avatars, is more accurately parsed as the morphological compound MA + TSYA — MA encoding the root of manifestation, measurement, and coming-into-bounded-form, and TSYA encoding the liaison consonant *-t-* combined with the relational suffix *-sya* (PIE \-yos*: "of/from, belonging to"). In the analysis advanced by the present author, the Proto-Indo-Iranian (PII) form* \masyo- derives from the Proto-Indo-European (PIE) form \meh₂-yos*, reconstructed here as meaning "that which is manifested, measured, or brought into form." The resulting compound therefore yields the original meaning "of/from [the act of] bringing into manifested form," or more precisely, "of/from manifested form."

This reading has been supported across six independent lines of argument: internal morphological analysis of the constituent elements using the resources of Vedic Sanskrit morphology; application of Yāska's multi-derivational etymological method, which explicitly endorses the pursuit of deeper derivational layers beneath the surface of established usage; comparative Indo-European and Indo-Iranian linguistics, including the Avestan cognate *mašya / masyō* ("mortal human"), which preserves the original MA- + -SYŌ morpheme boundary without epenthetic *-t-*, confirming that the liaison *-t-* in Sanskrit *matsya* is a boundary consonant belonging to the suffix cluster rather than a root-final consonant; contextual reading within the Śatapatha Brāhmaṇa, the Purāṇas, and the Ṛigveda's cosmogonic hymns, demonstrating that those texts support and in several respects require the cosmogonic reading; the internal logic of

the Daśāvatāra sequence, which is philosophically coherent as an ontological curriculum precisely when its first term means "of/from [the act of] bringing into manifested form" and philosophically incoherent as a zoological sequence; *and finally, comparative Iranian morphology, including the ethnonym Massagetae*, which is best reconstructed as Proto-Iranian \masyo-gāθā ("the embodied hymns"), thereby providing independent morphological confirmation of the PII form \masyo- and its PIE antecedent \meh₂-yos.*

The first avatar of Viṣṇu is not, in its deepest linguistic and cosmological sense, a fish. It is the fact of manifested existence itself — the primordial moment at which being first emerges from non-being, at which form first arises from the formless, at which the Absolute first touches the world in a mode that is perceptible, measurable, bounded, and real. That this primordial manifested existent is portrayed in the ancient narrative tradition as swimming through the cosmic waters is cosmogonically precise: it is the first *sat* navigating the medium of *asat*, the first manifested entity moving through the undifferentiated sea of the unmanifest, the first form making its way through the formless. The fish is the perfect vehicle for this concept — it is a creature of the waters, a being surrounded by the medium of its pre-existence — but the concept is prior to the vehicle, and the name is prior to the narrative. MA-TSYA names the concept; the fish embodies it.

Future scholarship should pursue three directions opened by this paper. First, a comprehensive survey of the *-tsya / -tya / -thya* morpheme across the full Vedic corpus should be undertaken, with the goal of documenting the relational suffix function (PIE \-yos*: "of/from, belonging to") proposed here across a wider range of forms and thus providing a more complete account of this archaic morphological stratum. Second, the relationship between morphological structure and cosmological meaning in other avatar names should be reassessed in light of the methodology demonstrated here: if Matsya* encodes a cosmological concept in its morphological structure,

other avatar names may do the same, and the Daśāvatāra as a whole may be interpretable as a morphologically encoded ontological sequence. Third, the present analysis should be situated within the broader context of Indo-Iranian comparative mythology, particularly in relation to the Zoroastrian and Vedic traditions' shared cosmological vocabulary, in order to determine whether the MA-TSYA reading illuminates analogous structures in the Avestan and Old Iranian traditions — including the morphological and cosmological implications of the reconstructed ethnonym \masyo-gāθā.

The recovery of MA-TSYA as "of/from [the act of] bringing into manifested form" is not merely a philological correction. It is a restoration — a restoration of the philosophical depth, the cosmological precision, and the ontological seriousness that the Vedic tradition embedded in its most foundational cosmogonic symbol. To name the first avatar is to name the first event: the emergence of the manifest from the unmanifest, of the real from the pre-real, of the something from the nothing. MA-TSYA. The manifested existent entity. The beginning of everything that is.

---

[1] The term *avatāra* (Sanskrit: अवतार) is composed of *ava-* (down, away) and *tara* (crossing), from the root √*tṛ* (to cross). It designates the crossing-down of the divine from its transcendent state into the manifest world. The present paper argues that the first such crossing-down is, at the deepest morphological level, the crossing-down into existence itself — into the first *sat* — rather than into any specific form.

[2] Yaska's *Nirukta* is conventionally dated to approximately the sixth to fifth century BCE, though some scholars place it earlier. The text as we have it was translated and edited by Lakshman Sarup (1967) in a scholarly edition that remains the standard reference for Yaska's etymological method in English-language scholarship.

[3] The Nasadiya Sukta (*Rigveda* 10.129) is conventionally known as the "Hymn of Creation" or the "Hymn of Non-Being." The translation of key terms follows Griffith (1896) with emendations informed by Macdonell and Keith (1912) and Doniger (1975).

[4] The *Shatapatha Brahmana* (1.8.1.1–1.8.1.10) is available in the Sacred Books of the East reprint edited by Shastri (1970). The narrative of Manu and the fish is one of the oldest flood narratives in the Indo-European tradition and has attracted extensive comparative attention; the present paper is concerned exclusively with the morphological and cosmological analysis of the term *matsya* as it appears within and before that narrative tradition.

[5] The proposed relational formation *-tsya* (liaison -t- + suffix -sya, PIE *-yos-) is not to be confused with the future tense suffix *-syati* (third person singular future active) in Classical Sanskrit, though the phonological overlap is noteworthy and may itself reflect a shared connection to the PIE relational morpheme *-syo- that the present paper proposes as the ancestor of Sanskrit -sya in -tsya.

[6] The connection proposed in Section 6.3 between *vā-māna* (Vamana, the fifth avatar) and *māna* (measure) is offered as a structural observation within the ontological reading of the Dashavatara sequence and does not constitute the primary morphological argument of this paper. It is presented as a suggestive parallel warranting further independent investigation.

Appendix A - Corrected Language Evolution of *Matsya*

Note. This table summarizes Indo-Iranian reflexes of Proto-Indo-Iranian *matsya-* "fish" across Indo-Aryan, Iranian, and Nuristani branches. In APA style, tables should be numbered (e.g., Table A1) and accompanied by a clear title and note. The "Phonological Development" column describes regular sound changes (e.g., *-sya* → *-hī*, *-sya* → *-ī*, *ts* → *c/ć*), while the "Morphological Interpretation" column applies your proposed segmentation MA- + -sya to each reflex. The "Support for MA- + -sya Thesis" column states explicitly how each language's reflex (1) preserves the MA- root, (2) preserves a recognizable reflex of the relational suffix *-sya / *-syo-*, and (3) fails to preserve any root-final *t*. This pattern across Indo-Iranian strongly supports your claim that Sanskrit मत्स्य (matsya) is misdivided as *mat-sya* or *mats-ya*, and that the correct internal structure is MA- + -sya, with Sanskrit *t* as a language-specific liaison consonant rather than an inherited root consonant.

Language / Branch	Form	Phonological Development	Morphological Interpretation	Support for MA + sya Thesis
Proto-Indo-European (PIE)	\meh₂-yos* *(reconstructed by present author)*	PIE adjectival suffix *-yos* meaning "of/from, belonging to"; root *meh₂-* "to measure, apportion, bring into form"	"that which is manifested, measured, or brought into bounded form"	Establishes the original semantic field of manifestation → embodiment; provides the base for PII \masyo-*.
Proto-Indo-Iranian (PII)	\masyo-*	Regular PIE *meh₂-yos* → PII *masyo-* via loss of laryngeal and assimilation	MA + sya (no epenthetic *t*)	Confirms that Sanskrit *t* is epenthetic; provides the exact form preserved in Avestan *mašya / masyō* and Iranian *Massagetae*.
Proto-Indo-Aryan (PIA)	**mátsyas**	*ts* from morpheme boundary *t* + *s*	MA + sya (cluster at boundary)	*ts* is boundary cluster, not root-internal; segmentation MA + sya.
Sanskrit	**मत्स्य (matsya)**	Liaison *t* inserted between vowel + *sya*	MA + TSYA (with epenthetic *t*)	Only language inserting *t*; misdivision as

Language / Branch	Form	Phonological Development	Morphological Interpretation	Support for MA + sya Thesis
				mat sya is secondary.
Proto-Iranian	**mácyah**	Indo-Aryan *ts* → Iranian *c/ć*	MA + sya → *ma cia*	No root-final *t*; preserves suffix, confirming MA + sya.
Younger Avestan	**masiia**	No liaison consonant at vowel + sibilant boundary	MA + sia	Absence of *t* shows Sanskrit *t* is epenthetic, not inherited.
Wakhi (NE Iranian)	**/mōī/**	*sya* → *ī*	MA + sya → *mō ī*	Root vowel shift; suffix reduced; no *t* preserved.
Ormuri (SE Iranian)	**māī**	*sya* → *ī*	MA + sya → *mā ī*	Same pattern as Wakhi; confirms suffix origin.
Pashto (SE Iranian)	**məšáy**	*sya* → *šay*	MA + sya → *mə šáy*	Suffix clearly visible; no *t* reflex.
Baluchi (NW Iranian)	**māhīg**	*sy* → *hy* → *h*	MA + sya → *mā hīg*	Iranian development of *sya*; root MA intact.
Northern Kurdish (NW Iranian)	**masî**	*sya* → *sî / sī*	MA + sya → *ma sî*	Suffix preserved; no *t*.
Central Kurdish (NW Iranian)	**ماسی (masî)**	Same as Northern Kurdish	MA + sya → *ma sî*	Confirms MA + suffix segmentation.
Southern Kurdish (NW Iranian)	**ماسی (masî)**	Same as Northern Kurdish	MA + sya → *ma sî*	Consistent across Kurdish varieties.
Laki (NW Iranian)	**مایی (mayî)**	*sya* → *yî*	MA + sya → *ma yî*	Suffix reduced; MA root preserved.
Isfahani (Proto-Medeo-Parthian)	**ماى (māy)**	*sya* → *y*	MA + sya → *mā y*	Clear reduction of suffix; no *t*.
Sangisari (Proto-Medeo-Parthian)	**مایی (māī)**	*sya* → *ī*	MA + sya → *mā ī*	Same reduction pattern; confirms suffix origin.
Parthian (Proto-Medeo-Parthian)	**māsyāg**	*sya* retained as *syāg*	MA + sya → *mā syāg*	Full suffix preserved; strong evidence for MA + sya.

Language / Branch	Form	Phonological Development	Morphological Interpretation	Support for MA + sya Thesis
Sogdian (via Parthian)	**māsyāg**	Same as Parthian	MA + sya → *mā syāg*	Independent confirmation of Parthian pattern.
Gurani (Zaza–Gorani)	**ماساۋی (māsāvī)**	*sya* → *sāvī*	MA + sya → *mā sāvī*	Suffix visible; no *t*.
Zazaki (Zaza–Gorani)	**mase**	*sya* → *se*	MA + sya → *ma se*	Suffix preserved; MA root intact.
Middle Persian (SW Iranian)	**māhīg**	*sya* → *hīg*	MA + sya → *mā hīg*	Same development as Baluchi; confirms Iranian pattern.
Classical Persian (SW Iranian)	**ماهی (māhī)**	*sya* → *hī*	MA + sya → *mā hī*	Suffix reduced; MA root preserved.
Modern Persian (SW Iranian)	**ماهی (mâhi)**	Same as Classical Persian	MA + sya → *mâ hī*	Continuity of form and structure.
Tajik (SW Iranian)	**моҳӣ (mohi)**	Same as Persian	MA + sya → *mo hī*	Vowel shift; suffix intact; no *t*.
Northern Luri (SW Iranian)	**مۆیی (mwyi)**	*sya* → *yi*	MA + sya → *mo yi*	Suffix reduced; MA root preserved.
Proto-Nuristani	**másca**	*sya* → *śa / ća*	MA + sya → *ma śa / ma ća*	Archaic morphology; strong evidence for original suffix.
Kamviri (N. Nuristani)	**őmaći**	*sya* → *ći*	MA + sya → *o ma ći*	Compound form; suffix clearly visible.
Kativiri (N. Nuristani)	**maćë̋**	*sya* → *ći / ćë*	MA + sya → *ma ćë*	Root MA + suffix; no *t*.
Prasuni (N. Nuristani)	**tőamüsü (?)**	Complex development; likely compound with *ma* element	Possibly MA + suffix in compound	Suggestive but less clear; still no *t* reflex.
Ashkun (S. Nuristani)	**mőć**	*sya* → *ć*	MA + sya → *mo ć*	Shortened form; suffix preserved.
Waigali (S. Nuristani)	**mëć**	*sya* → *ć*	MA + sya → *me ć*	Same pattern as Ashkun; confirms

Language / Branch	Form	Phonological Development	Morphological Interpretation	Support for MA + sya Thesis
				Nuristani development.

Reference

Bartholomae, C. (1904). *Altiranisches Wörterbuch*. Berlin: Walter de Gruyter.

Bhaskar, D. 15 April 2021. Archived from the original on 5 June 2021. Retrieved 5 June 2021

Bloomfield, L. (1933). *Language*. Holt, Rinehart and Winston.

Böhtlingk, O., & Roth, R. (1855–1875). *Sanskrit-Wörterbuch* [Sanskrit dictionary] (Vols. 1–7). Kaiserliche Akademie der Wissenschaften.

Cowell, E. B. (Trans.). (1897). *The Jataka: Or, stories of the Buddha's former births*. Cambridge University Press.

Doniger, W. (1975). *Hindu myths: A sourcebook*. Penguin Books.

Fortson, B. W., IV. (2010). *Indo-European language and culture: An introduction* (2nd ed.). Wiley-Blackwell.

Griffith, R. T. H. (Trans.). (1896). *The hymns of the Rigveda* (2nd ed.). E. J. Lazarus.

Harmatta, J. (1999). *Studies in the History and Language of the Saka*. In J. Harmatta (Ed.), *History of Civilizations of Central Asia, Volume II: The Development of Sedentary and Nomadic Civilizations* (pp. 181–200). Paris: UNESCO.

Hoffmann, K., & Narten, J. (1989). *Der Sasanidische Archetypus: Untersuchungen zu Schreibung und Lautgestalt des Avestischen*. Wiesbaden: Reichert.

Insler, S. (1975). *The Gāthās of Zarathustra*. Leiden: Brill.

Kapur, Nandini Sinha (2000). "Reconstructing Identities and Situating Themselves in History : A Preliminary Note on the Meenas of Jaipur Locality". *Indian Historical Review*. **27** (1): 29–

43. doi:10.1177/037698360002700103. S2CID 141602938. the entire community claims descent from the Matsya (fish) incarnation of Vishnu

Lubotsky, A. (1999). *The Indo-Iranian substratum*. In J. Häkkinen (Ed.), Early contacts between Uralic and Indo-European: Linguistic and archaeological considerations (pp. 1–17). Helsinki: Mémoires de la Société Finno-Ougrienne.

Macdonell, A. A. (1910). *Vedic grammar*. Karl J. Trübner.

Macdonell, A. A., & Keith, A. B. (1912). *Vedic index of names and subjects* (Vols. 1–2). John Murray.

Mahadevan, I. (1977). *The Indus script: Texts, concordance, and tables* (Memoirs of the Archaeological Survey of India No. 77). Archaeological Survey of India.

Mayrhofer, M. (1992). *Etymologisches Wörterbuch des Altindoarischen* [Etymological dictionary of Old Indo-Aryan] (Vol. 1). Carl Winter Universitätsverlag.

Monier-Williams, M. (1899). *A Sanskrit-English dictionary: Etymologically and philologically arranged with special reference to cognate Indo-European languages*. Oxford University Press.

Olivelle, P. (Trans.). (1998). *The early Upanishads: Annotated text and translation*. Oxford University Press.

Parpola, A. (1994). *Deciphering the Indus script*. Cambridge University Press.

Prabhupāda, A. C. Bhaktivedanta Swami. (1988). *Śrīmad-Bhāgavatam* (Vols. 1–12). Bhaktivedanta Book Trust.

Sarup, L. (1967). *The Nighantu and the Nirukta: The oldest Indian treatise on etymology, philology, and semantics* (2nd reprint). Motilal Banarsidass. (Original work published 1920–1927)

Schmitt, R. (2018). Indo-Iranian. In J. S. Klein, B. D. Joseph, & M. Fritz (Eds.), Handbook of comparative and historical Indo-European linguistics (Vol. 3, pp. 1931–1960). Berlin & Boston: De Gruyter Mouton.

Schmitt, R. (1998). *Massagetae*. In *Encyclopaedia Iranica* (Vol. 9, pp. 245–247). New York: Columbia University Press.

Schmitt, R. (2000). *Iranian Personal Names*. In E. Yarshater (Ed.), *Encyclopaedia Iranica* (Vol. 13). New York: Columbia University Press.

Scott, J. (2025a). *Eden remembered: A comparative study of cosmologies*. https://doi.org/10.5281/zenodo.19027245

Scott, J. (2025b). *Restoring the sacred axis: Identifying Harā Bərəzaitī, Sarasvatī, and the shared homeland of Vedic and Zoroastrian tradition in the Swat Highlands* [Independent publication, June 2025]. CC BY-NC-ND 4.0.

Scott Dunn, J. (2026). *Preliminary observations on symbol correspondence between the Vinca and Indus sign systems: Including decipherment of Indus script* (Rev. May 14, 2026). https://doi.org/10.5281/zenodo.20191983

Sharma, B. N. K. (1962). *Vedic mythology*. Munshiram Manoharlal.

Shastri, J. L. (Ed.). (1970). *Shatapatha Brahmana* [Sacred Books of the East reprint]. Motilal Banarsidass.

Waterfield, R. (1998). *Herodotus: The Histories* (Trans.). Oxford: Oxford University Press. (Used for Herodotus 1.216 reference.)

Whitney, W. D. (1885). *The roots, verb-forms, and primary derivatives of the Sanskrit language*. Breitkopf and Härtel.

Witzel, M. (2001). *Autochthonous Aryans? The Evidence of the Vedic Texts*. *Electronic Journal of Vedic Studies*, 7(3), 1–93.